# Lectures
ON THE
# NATURAL HISTORY AND TREATMENT OF HIP-JOINT DISEASE.

*Delivered at the Charing cross Hospital Medical School,*

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## LECTURE IV.

GENTLEMEN,—I must still occupy your attention, during a portion of this lecture, with the subject of Extension, and with certain correlative circumstances. I was able to prove to you, during the last lecture, (though those of you who have followed my practice required, I believe, no proof,) that extension properly used was able, even in acute cases, to procure ease, annul starting pains, and in the great majority of instances to prevent suppuration.

It occasionally, though rarely, happens that a patient whose diseased limb is drawn up, and who suffers severe pain, will only be thrown into greater agony by any form of extension. Even if the limb be placed and fastened in a normal position while he is under the influence of chloroform, the sufferer will nevertheless awake to very severe pain, sometimes so unbearable as to necessitate the release of the limb, allowing it, of course, to be drawn up again. In this condition the actual cautery, properly used, will be found invaluable. A single line drawn, after the manner described in my first lecture, behind the trochanter will, as I told you at the time, entirely annihilate both the starting and the wearing pains. Thus the limb can be brought down while the patient is still insensible from the chloroform, and he will awake free from pain. You will remember that when describing, in my first lecture, the value and the shortcomings of the cautery and other exutories, I told you that in from three weeks to two months the original evil for which they were employed recurs. But extension, applied at the time when ease is produced by the burn, will not afterwards allow the recurrence of pain, and the patient is comfortable from the moment of the double appliance. Still my recommendation to you is, never to break the skin by seton, cautery, or any other exutory, unless it be rendered absolutely necessary by constant and spasmodic pain of so irritable a character that the posture of the limb cannot be modified by extension without increasing the patient's sufferings.* Moreover, as any artificial ulceration is of the merest temporary benefit if retraction be allowed to continue or to recur, I must further warn you against making the line of cauterization too high above, or too far behind, the trochanter; for in either position it will interfere with the application of a perineal band for counter-extension.

Another method of treatment claims here but a very few words, since I have elsewhere considered its faulty therapeutism—namely, division of muscles in acute hip disease, not merely for the restoration of posture, but also as a remedy for the spasmodic pains. This plan has been more particularly advocated and adopted by Dr. Baner of Brooklyn; and I may the more plainly speak in disparagement of such proceeding, since I have already mentioned with deserved encomium that surgeon's name. Division of any muscle will doubtless destroy its power; and therefore if all the muscles around the hip-joint be cut, the inter-articular pressure and the starting pains must cease until reunion takes place; but they then recur, and downward extension becomes necessary. I have formerly used myotomy where irritability produced difficulty in applying extension; but though the operation is not severe, nor followed by noteworthy fever, it is unnecessary, and therefore unwarrantable, while we possess, for combating pain and malposture, so perfect a resource in downward extension, combined in a few exceptional cases with the actual cautery.

You will recollect patients who entered the wards thin, worn, and with that peculiar anxious countenance which we see in painful joint-disease; you will remember their lying for some time on their backs with the extension apparatus applied, gradually losing the worn look, beginning to gain flesh, and to appear rosy and cheerful. Then, after another interval, you will have observed them walking about the wards. Now, it is very necessary you should know how you are to decide when to release your patients from the extension. After about a month or six weeks in non-suppurated cases, after a longer period if abscesses have formed, you may examine into the state of tenderness about the haunch, the groin, the fossa behind the trochanter, and into the tenderness at the joint, by pressing the trochanter inwards and the heel upwards. If these manœuvres produce no pain, take off the india-rubber extension-spring, but leave on the splint. If after two or three nights no starting pains recur, then the splint may be removed, and the limb should be rubbed by the nurse and by the patient himself. Let me caution you against moving the limb as soon as you take off the splint. Remember that the muscles have long been at rest, and motion would produce considerable pain without affording you the slightest knowledge about the state of the joint. You must wait two or three days, and the commencement of motion must be very gradual. If, however, during this interval there have been no recurrence either of pain or retraction, you will in all probability find the joint sufficiently recovered to allow the patient to rise.

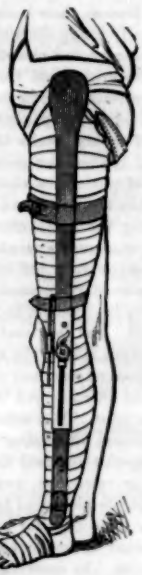
We have thus far advanced but half way towards our goal. We want to make our patient walk with little or with no lameness. In cases that have come under treatment early—i. e., before any suppuration has taken place, this can nearly always be accomplished with tolerable ease; but when a certain amount of destruction of tissue has occurred, and pus has formed in the joint, it is always a difficult matter to get the patient about again; because any weight thrown upon the healed ulcers in the acetabulum and head of the femur has a great tendency to light up fresh inflammation. We are thrown, then, upon this dilemma: by keeping our patient in bed, we are allowing the health greatly to deteriorate; by getting him up and causing him to walk, we risk injury to the joint. Under these circumstances I have used the splint invented by Dr. G. H. Davis, and improved by Dr. L. Sayre, of New York, with very great advantage. This instrument consists of two steel portions, which slide in one another by means of a wheel and ratchet, so that the whole can be lengthened *ad libitum*. At the top of the upper portion is a perineal band (*g*). At the bottom of the lower portion is a steel roller; and, a little above that, a buckle (*b*). Long strips of plaster an inch and a half or two inches broad, are to be carried from the top of the limb to the malleoli; two spiral or cross-gartering pieces which connect these meet together over the lower end of the outer longitudinal strip, and to the three together a piece of webbing is sewn. The splint is then placed *in situ*, the perineal band and the other straps (*d*, *f*) properly secured, and the webbing passed under the roller and fastened tightly to the buckle. We have thus secured a stiff steel splint between two fixed points in the limb, the upper one on the pelvis at the perineal band, the lower one at the ankle. By lengthening out the two portions of the splint until it is absolutely a little longer than the bone between these two points, the weight of the patient will fall, not on the caput femoris and acetabulum, but on the perineal band, a constant extension being kept upon the limb. I have used this instrument in several cases with advantage, but have lately adopted another modification, which reaches only to the

* Bonnet relates cases in which he endeavoured to restore posture by manual force without anæsthesia. Such attempts, though sometimes quite and generally partially unsuccessful, produce, even as he confesses, atrocious pain; yet he thought so highly of the remedial effects of good position as to continue the practice.

knee, taking its bearing through strapping plaster both from the inside and outside of the thigh. Thus the knee is left at liberty, and the instrument may be concealed by the trousers, or more easily by the dress of women.

FIG. 11.*

FIG. 12.*



These splints are of very great advantage in such cases as that of Fanny L——, to which I would call your attention. This girl came under my care suffering from suppuration at the hip, which had been continuing, with occasional intervals, for fifteen years. Her leg was six inches and a half short. After the extension-splint had been used for some time, so that the acute stage of the inflammation had been subdued, and the position of the limb so changed that it became apparently as long as the other, I applied the short American splint, and she walked about after a time extremely well. You will also remember Edwin P——, whom I treated similarly, only using the long American splint, for at that time I had no short one. Although in both these cases the chief violence of the inflammation had passed, inflammatory action was still going on in the hip; indeed, if they attempted to put any weight on the limb, severe pain was produced. Nevertheless, by the judicious use of this splint, they were enabled to walk about, gaining health, appetite, and strength wherewith to overcome the disease. These cases are not isolated. You will remember others in my hospital practice, and I have had several in private. The gain is very important, not only to the patient himself, but by relieving his friends from the trouble, expense, and anxiety produced by a bedridden sufferer always wanting special attention.

The principle of utter rest in joint-disease was not originated, but was most strongly insisted on, by Sir B. Brodie, and may perhaps have received some additional support from recent lectures at the College of Surgeons; but I must point out that rest for a diseased joint consists of two separate conditions—absence of movement and absence of articular pressure, the latter being, I believe, the more important element. The school of surgery to which I have just referred insisted upon the former portion with unswerving rigidity, but left the latter quite unnoticed. Under such treatment, and by such school, hip-disease has been deemed incurable. A different view of the sort of rest chiefly necessary, leading to another, and I firmly believe to a more reasonable practice, has shown me that hip-disease, although a somewhat refractory, is quite a manageable malady.

We often have the opportunity of seeing a patient only after the capsule has burst and external abscesses have formed; these will make their appearance in places depending upon the part of the capsule which has given way, upon the disposition of fasciæ, and on the posture which the patient chiefly or entirely assumes. If an abscess appear about the buttock, we should conclude that the capsule had opened behind; if at the groin, that it had burst in front; and so on. Too much, however, must not be taken for granted concerning the place of rupture in the capsule, for the abscesses often burrow a considerable distance, in directions chiefly depending upon the position of the patient. Thus, if the erect posture have been permitted, the matter may pass down the thigh and come to the surface even at the knee. If the decubitus be on the diseased side, the openings of sinuses will appear about the trochanter. If lying on the sound side be the chosen posture, the pus will pass towards the middle line, either behind or in front, according as the capsule has opened in one or the other situation. If the patient be kept on the back, the matter will present chiefly about the fold of the nates and back of the thigh; even though it may originally come from the front and inner part of the capsule, the fluid passing under the neck of the bone along the obturator externus. Occasionally, however, the matter will take a course quite independent of gravitation. Thus a patient lying on the back will have an abscess pointing half-way down the front of the thigh. Such abscesses run along the sheath of the rectus muscle, the peculiar connexion of whose long head with the acetabulum you will remember.

The one point to be observed in the management of these abscesses is to leave them alone rather than to use any active interference. They should not be opened, unless inconvenient by their mere size and weight. Cutting into such collections is frequently followed by exacerbations of the disease. Even when they open spontaneously the same results ensue to a less degree. If, however, their size and tension render them painful, these effects may be relieved by making an oblique opening with a trocar and canula, and closing the wound as soon as a sufficient amount of fluid has been evacuated.

Another, even a weightier, reason for not opening these abscesses is that you may procure their absorption. The first step to this will be to prevent the formation of more matter at the fountain-head by checking destruction of tissue in the manner just discussed. You will recollect several cases which came under my care with abscesses from hip disease: in none of them was the pus evacuated; it was simply absorbed.

* From Dr. L. A. Sayre's "Report on Morbus Coxarius." Philadelphia, 1860.

## ON THE CALABAR BEAN:

### ITS ACTION, PREPARATIONS, AND USE.

BY THOMAS NUNNELEY, ESQ., F.R.C.S.E.

(*Continued from p. 505.*)

3rd. What is the effect upon the eye when locally applied? From the statements which have already appeared from several observers, almost everybody now knows that the effect is to contract the pupil, so that it would be useless to repeat in detail the numerous experiments which I have made upon the eyes of different animals; but some must be given to illustrate the effect of the different preparations, so that the deductions may be understood, and the physiological importance of others shown.

*Ether extract.*—Powder first treated by cold, afterwards by hot ether; both extracts dissolved in glycerine.

Old terrier dog. Into the right eye the cold extract was put; into the left the hot extract. Considerable irritation, redness, and lachrymation were instantly induced in both eyes, but the most in the left. In five minutes both pupils were somewhat contracted, the right most so, but in neither was the effect great, and in twenty minutes had passed away.

Skye bitch. The hot extract was put into one eye, and the

cold into the other eye. Redness, lachrymation, and irritation were as before caused, which, however, soon passed off. No effect whatever was produced upon the pupils.

Two days afterwards the experiment was repeated with the same result.

Upon a full-grown cat a similar experiment was performed. Considerable, but temporary, irritation and watering were induced; the pupils were rather dilated than contracted.

Upon a half grown kitten a like application was made with like results, except that the left pupil, where the cold extract had been applied, was decidedly dilated.

Into the eyes of two men and a boy both the hot and cold extract were put several times, without any contraction of the pupils being caused. Redness, irritation, a little pain, and lachrymation were always at once induced for a few minutes.

*Chloroform extract.*—Powder treated first by cold, afterwards by hot chloroform; both extracts dissolved in glycerine.

Upon the same two dogs, two cats, two men, and boy, similar and repeated experiments were made; the cold extract being put into one, the hot extract into the other eye. Some smarting, considerable irritation and redness, with free lachrymation, were for a short time induced. In one experiment the cold extract produced some slight temporary contraction of the pupil, with which exception no effect upon the iris was observed.

*Water extract.*—First treated with repeated boilings of distilled water, residuum afterwards with boiling proof spirit. The extract obtained by water, when put into the eyes of cats and dogs, produced very little irritation or redness, and very little effect upon the iris; perhaps some contraction was caused, but it was very slight in comparison with the effect of the pure spirit extract. The effect of the residuum treated with boiling proof spirit was greater than the simple water extract, but not so great as that obtained from the bean by alcohol; though, as I am not sure that in the evaporation of these extracts somewhat too much heat was not used, I would speak of the effect of these with more reserve than of the other preparations.

*Hydrochloric acid extract*, dissolved in glycerine. This I tried by introducing it into both eyes of two dogs and two cats. In one of the dogs it instantly caused great irritation, redness, and watering; I think, also, much pain, which continued for some considerable time. In the other dog, though present, these symptoms were in a much less degree, and in the two cats in a still less, though they did not appear to be very comfortable. The effect upon the pupils was not considerable. In the first dog no contraction was induced, the extract probably being washed away by the lachrymation. In the other dog and the cats the contraction of the pupil was slowly developed and by no means great, but it continued most of the day. The experiments were made early in the morning. By evening all contraction of the pupil had disappeared, though the dog's eyes continued red and irritable even on the following morning.

*Spirit extract.* Three kinds of extract: first, that obtained after cold and hot ether had extracted what they would dissolve; second, that obtained by boiling spirit from a brown kernel bean; and third, that from an ordinary white bean. All dissolved in glycerine. Numerous experiments have been made upon dogs, cats, men, and boys with these three extracts, of various strengths, ranging from one grain of the extract in twenty of glycerine to one grain in sixty of glycerine. In all the effect has been contraction of the pupil. In the great majority of cases neither pain nor redness, and but little watering has been caused. In some few cases, however, there is pain and considerable lachrymation when, from, I presume, the preparation being washed out, the effect is slower and more imperfect. In most cases the effect is seen in less than five minutes, and in some in less than thirty seconds contraction may be observed beginning. Within an hour the full effect is almost invariably established. In from four to six hours the intensity usually lessens, within twelve hours it has greatly abated, and in twenty-four, so far as I have observed, it has altogether disappeared. In the three extracts I observed very little difference in the effects produced: that obtained after ether exhaustion seemed to possess nearly if not quite as much power as either of the others.

*Bell's glycerine extract* in capillary tubes. Half the contents of a tube was blown into each eye of a Scotch terrier bitch. No irritation was induced. For ten minutes no effect was perceived, when both pupils began slowly to contract, and continued to do so for seven or eight minutes, until considerable but not excessive contraction was established, particularly in the right eye. They continued in the same condition for two hours; in four the effect was subsiding. Neither gaslight nor candlelight placed close to the eyes had any influence. The next morning the effect was subsiding, though the right was still the smaller pupil. In twenty-four hours both pupils were natural.

An African bitch, a most timid and excitable creature, had the extract blown into the right eye only. Contraction of the pupil *instantly* began; in two minutes it was not half the size of the left, and in ten it was not a quarter the size. They continued in this state for half an hour, the left pupil being widely dilated, while the right was not a fourth of its size. A lighted candle was now placed before the eyes, by which the dog was greatly alarmed, and struggled hard, when the left pupil contracted and the right dilated, so that for a time they became equal in size; but so soon as the candle was removed and the dog became calmer the former inequality returned. At four hours the contraction of the right iris had passed away, and both pupils had become widely dilated. No contraction in either pupil could be induced by either gas or candle light. The following morning both pupils were alike and normal.

*Paper saturated with tincture of Calabar bean*, as prepared by Mr. Squire and Messrs. Bell and Co. By far the greater number of experiments made with Calabar paper have been with that sent to me by Mr. Squire. The animals upon which these have been tried are several dogs, many cats, four horses, one pig, four cows, six sheep, four fowls, and many human subjects. These, with the exception of the sheep, which I shall have to refer to, I need not particularize. The effect upon all animals is uniform: contraction of the pupils pretty much, I think, in proportion to the size of the piece of paper inserted, and the retention of it for a time in the eye. This latter point is one of importance, and if not carefully noted may lead to error. In some animals it will remain for thirty-six hours or more quietly enough; but in others, either from the lachrymation excited, it is speedily washed out, or, from the irritation its mere presence as a foreign body excites, it is soon got rid of, and hence its influence lost; I say for a time, for, so far as I can judge, if retained for two hours, or even less, the effect is as great as if retained for twenty-four, the influence being exhausted in this time.

Of all animals cats are the best for experiment, their active and brilliant-coloured irides showing the effect most markedly. In horses, oxen, and sheep the effect is not so great. In them the iris is not naturally so active and mobile; hence, I presume, the less effect upon these oval-pupiled animals than upon the more active moving pupils; and a much longer time is required, particularly in oxen, for the full effect to be produced, whether Calabar or atropine paper be used. In some eyes, where in two hours I thought very little effect would be caused, in twenty-four hours I found full effect had occurred; and in one cow, where I had put atropine paper into one eye and Calabar bean paper into the other, while there was very little result in two hours, in thirty-six I found the one pupil widely dilated and the other closely contracted, more so than I have seen in any other ruminant.

I have been wishful to try the effect upon the more actively moving pupiled birds—as parrots, owls, and hawks; but hitherto I have failed in obtaining subjects for experiment. In the common fowls I have been disappointed in the result; for though I have used both Bell's and Squire's paper, and also Squire's tincture, in both eyes of the same fowl, and also in one eye, while I have put atropine paper into the other, I have seen comparatively little effect. It is very difficult to keep the paper in, a free secretion of fluid is poured out, and the birds are in great excitement; which may in part, if not wholly, account for this.

A lamb. Squire's paper was put into the right eye: in a short time (less than half an hour) the pupil contracted, and continued fully half contracted up to seven hours, when the lamb was killed, the left pupil being unaffected.

A lamb. Calabar paper was put into the right eye, and atropine paper into the left. The right pupil became greatly contracted, the left greatly dilated, and so continued for seven hours, when the animal was killed.

A lamb. Similar experiment as the last, with precisely similar effect.

An old sheep. Similar experiment—the Calabar paper in one eye and atropine paper in the other—with precisely like results to the last two. The effect was intense: the left pupil (atropine) was greatly dilated, the right pupil (Calabar) greatly contracted.

A sheep. Calabar paper put into both eyes: in three hours both pupils were rather but not much contracted; in seven hours the right pupil was rather more contracted, but the left pupil was not. Calabar paper was again put into both eyes: the next morning—twenty-four hours after the first putting in,

and seventeen after the second—the paper was still in the left eye, not in the right. Both pupils were alike, and unaffected.

A sheep. Calabar paper put into the right eye only: in three hours, the paper being still in, the pupil was considerably contracted; the left eye unaffected. Killed.

A sheep. Both Calabar and atropine papers were put into the eyes: in three hours both papers were in the left eye, the atropine only in the right eye, but *both* pupils were alike somewhat dilated; in six hours the pupils were in the same condition, the papers being still in as at three hours. Now (at six hours) both Calabar and atropine papers were again put into both eyes: the following morning, twenty-four hours after first putting in, both papers had disappeared from the right eye; in the left the Calabar paper was still present, but not the atropine. Both pupils were alike, and unaffected.

*Tincture of the bean.*—This, as prepared by Mr. Squire, is of pale-brown colour, not unlike pale brandy. Though not strong nor unpleasant to the taste, it yet, when placed upon the tongue (to me), leaves a rather pungent feeling at the spot, and induces a sudden sinking feeling of nausea at the stomach. It acts readily and well, producing almost instantaneous contraction of the pupil. It is too strong to use alone; indeed, the spirit it contains would preclude its employment undiluted, but when mixed with water it is readily borne, and is effective. I have tried it on many animals and scores of human subjects with the uniform effect of contracting the pupil. I added two drops of the tincture to twenty of water, and put it into the eyes of five persons who were suffering from slight diseases of the appendages of the eye, the globes being unaffected. In all full contraction of the pupil was within an hour fully induced, without causing pain or any unpleasant feeling.

*Continued contraction of pupils.*—I have stated that in twelve hours the effect has considerably subsided, and, in twenty-four hours, commonly entirely passed away. Hence, if permanent contraction of the pupil be desired, repetition of the application is necessary. In cats and dogs, by the daily repetition of the local application, I have kept the pupils in a state of contraction for a week: in one man for ten days, in another for a fortnight, and in a boy for nearly one month. In twenty-four hours the effect had in all cases nearly, if not altogether, subsided. I used for this purpose the various preparations before named. The chloroform, ether, and aqueous extracts I repeatedly tried, and always, particularly the two first, found them to fail; the others, which had been extracted by spirit, always succeeded. The effect appeared not to vary from day to day. No inconvenience was caused; and, on the cessation of the application, the effect passed off.

When atropine is put into one eye, and Calabar bean in the other, they act quite independently of each other, neither in any way being influenced by the other. When placed in the same eye together, or one after the other, they are antagonistic to each other; and though in several experiments which I have performed, where I have placed the two together in the same eye, or more frequently where, after the pupils have been dilated by atropine, Calabar bean has been introduced shortly afterwards, I have seldom succeeded in observing that the effect of the one counterbalanced that of the other; and, indeed, have doubted, after the pupil has been *fully* dilated by atropine, if the Calabar bean exercised any very great effect in contracting it, it is possible that this only arises from the strength of the two not having been adjusted; and that if this problem were correctly solved, the two might be found to neutralize each other.

As Dr. Christison has well remarked in his description of this bean and its effects upon himself, it is by no means so easy, as those who are not accustomed to delicate physiological investigations might suppose it to be, to accurately determine the precise *modus operandi* of many poisons, particularly when death quickly ensues. Hence numerous errors have prevailed, and probably even now some exist, as to the true action of many poisons with which we have long been acquainted, and with which experiments have frequently been made. To no poison is this remark more applicable than to the Calabar bean. In addition to its speedy depressing action, in which motive power is lost, all means of expressing sensation or intelligence are soon impaired and destroyed, so that it becomes extremely difficult to feel sure whether the non-expression arises from non-perception or the loss of the capacity of indicating what is perceived; and as after death literally no abnormal changes are found in any of the organs or tissues, the more reliable indications of the parts primarily acted upon by the poison are wanting. We are thus reduced to inferences drawn from the observance of phenomena exhibited during life, which are very liable to be misinterpreted. Dr. Harley, I see from a paper recently published,* considers that life is destroyed by the drug "paralyzing the nerves which supply the respiratory muscles—being, in fact, a respiratory poison;" but I rather incline to agree with Dr. Christison in the supposition that death results from paralysis of the heart. Not that I believe the bean acts specifically upon the heart, but that the contractile power of it, in common with that of all the other muscles, is suspended, and hence that no blood is circulated. Of course, as respiration is most feebly and imperfectly performed, the failure of this function will also assist. That this is the effect when the dose is large and death speedily ensues I feel little doubt. Were death caused by suspended respiration, the appearance of the lungs and heart would resemble that found after death by asphyxia. The lungs and heart, particularly its right side, would be found gorged with black blood. This, however, is not the case, for the lungs are found pale and, on opening the chest, greatly collapse; while the right side of the heart is not greatly distended, the blood is not dark, and there is a difference of colour on the right and left sides of the heart. It is, however, very probable that a considerable difference in the mode of death and the post mortem appearances will be found, according as the dose is large and death speedy, or the dose smaller and death slower. In the latter case, as the respiration is more and more imperfectly performed, while a feeble stream of blood is passed through the body, the later symptoms during life, and the appearances after death, will approach more to those resulting from pure asphyxia.

But whether death results from suspension of the contractile power of the heart (syncope), or of that of the respiratory muscles (asphyxia), it is questionable whether either should be regarded as more than a secondary cause. What induces this powerlessness of these muscles? Is it owing to some direct action upon them or either of them, or to the loss of the nervous influence by which they act? and if the latter, upon what part of the nervous system is the effect produced? Dr. Fraser, to whom, after Dr. Christison, the profession is most indebted for calling attention to this bean, considers it is the spinal cord which is primarily affected, and that the Calabar bean is a direct depressor of the cord,† acting more especially upon the motor columns, and hence the muscular paralysis. This may be the case; but I am not so certain that it is, and I should require further investigation before I considered the question to be proved. Though much has been done during the last few years to explain and analyze the functions of the different portions of the nervous masses and the cords in connexion with them, I am by no means certain that we can consider their respective functions to be so clearly and unequivocally separated and determined as some appear to be; nor that we are altogether in a position to speak, as is now often done, of one agent being a depressor, and another an excitor (using the ordinary meaning of the words) of the respective portions of the nervous masses. Calabar bean has been declared to be a depressor of the spinal cord, strychnia an excitor of it, and that, as their actions are contrary, the two will neutralize and destroy the effects of each other. But is this demonstrated?—is it absolutely true that paralysis of the muscles is always synonymous with depression of the spinal cord, and over irregular action of the muscles with excitement of it? The idea is plausible, and supported by many facts, physiological and pathological. But I pause and wait for more evidence before I can admit as undeniably true the broad statements made as to the action of agents such as those under consideration. That the action of the bean is not upon the cerebrum is most probable. All the senses appear altogether unaffected, and so does volition; but it does not necessarily follow that the effect must primarily be upon the spinal cord, and be a suspension of its motive power. The effect may be upon the ganglionic system of nerves quite as much as upon the spinal marrow for anything that I see to the contrary; or, so far as is known, it might even be upon the muscular tissue itself, rendering it incapable of obeying the nervous influence. The evidence as to the muscles contracting for some time after death, and the sequence in the order of the cessation of the contraction of the four cavities of the heart, is really of no weight whatever, as those who will destroy animals by many other agents or means, and carefully watch them, will admit. Give hydrocyanic acid, chloroform, and many other anæsthetics; remove the cerebral mass, pith the animal, or entirely remove the spinal marrow, and the same will be seen to be the usual order of things. No

* British Medical Journal for Sept. 5th, 1863.

† I regret that I had not the opportunity of reading Dr. Fraser's excellent and elaborate dissertation on the Calabar bean until after most of my experiments were made, and the inferences drawn from them publicly announced. The dissertation will be found in the *Edinburgh Medical Journal* for July, August, and September, 1863.

more organic change after death is to be found in the spinal cord than there is in the muscles.

One argument which has been relied upon—the contraction of the iris—to show that the functions of the upper part of the spinal cord, from which the nervous fibrillæ which govern its dilating power are now supposed to arise, are depressed, would rather, I think, tend to prove, not that the spinal cord is the part primarily influenced, but the sympathetic nerves, of which these fibrillæ are a part. This is a view which the feeling of excessive sinking at the pit of the stomach, with faintness and nausea, so speedily induced by eating a little of the bean, would also countenance. Everybody knows what intense depression of the entire muscular system is induced by impressions made upon the solar and cardiac plexuses, even to sudden death from prostration, from an apparently trivial cause. Besides, I can hardly conceive it to be possible that such intense contraction of the fibres of the iris which certainly results from an active motive power, such as would imply a stimulus, is consistent with a total depression of the cord. If the action of the poison were exclusively upon the spinal cord, we should find that when the whole system is, so to speak, saturated with it, from its absorption into the blood, and when a much more considerable quantity of it must be carried to the whole cord, as when it is administered internally in large and repeated doses, that the contraction of the pupil would be much more decided and long-continued if this arose from paralysis of the fibrillæ going to it from the cervical spinal cord, than when the agent is only in minute quanti y applied locally to the eye. Whereas the contrary is the case. In fact, while contraction of the pupil in the local application of the agent is the striking fact, in the internal administration this contraction is hardly perceptible; often it is not seen at all, and never is observed in an extreme degree.

I make these observations, not as asserting that the action of the bean is specifically and primarily upon the muscles or sympathetic nerve, but to guard against it being too hastily assumed as proved that it is upon the spinal cord, and as a depressor of it. A false fact taken as a true one has often done, and in physiology and pathology I fear still does, more harm than many false theories.

(*To be concluded.*)

## CONGENITAL TUMOURS OF THE TONGUE IN A PATIENT AGED TWENTY-SEVEN.

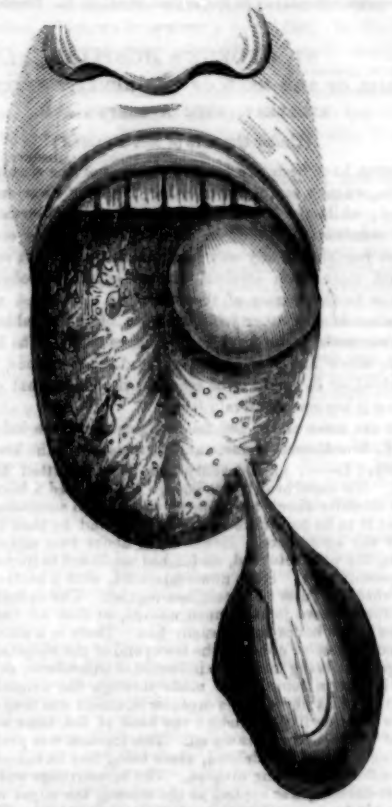
By FRANCIS MASON, Esq., F.R.C.S. (Exam.),
ASSISTANT-SURGEON TO KING'S COLLEGE HOSPITAL.

THE subject of this case was a woman, aged twenty-seven, who came under my notice at King's College Hospital in August of the present year. At the time of her birth, attention was directed to her tongue, to which were attached three tumours, situated in the positions indicated by the engraving. Positive instructions were given to her mother that any surgical interference would be attended by fatal hæmorrhage; and the same opinion having been expressed to the patient herself, she has naturally felt unwilling to incur any risk by their removal. Her parents say that the tumours have been about the same size since her birth, and so long as she can remember they have never varied until a month ago, when the anterior growth swelled slightly. The swelling, however, disappeared in a few hours, and the tumour has since presented its usual appearance. The notes taken at the time of her application are these:—

"The patient is a healthy-looking woman. Three tumours are seen attached to the tongue: the smallest about the size of a pea; the next in size about as large as a shilling; and the largest measuring two inches and a quarter in length, one inch and a quarter in breadth, and a quarter of an inch in the antero-posterior direction. Each tumour is connected with the tongue by a narrow pedicle. The surface is of a light-pink hue, and presents a shiny appearance, having very fine vessels running over it. The tumours are uniformly smooth, soft, yet firm to the touch, are not papillated, and in no way resemble the ordinary structure of the tongue. When this organ is protruded, the tumours are seen as in the engraving; and when *in situ*, the anterior tumour lies upon its dorsum. The patient has no muscular power over the tumours; speech scarcely impaired; no difficulty in mastication; manipulation gives no pain."

Being somewhat alarmed by the sudden enlargement above referred to, she was anxious to have the anterior growth removed. I therefore placed a ligature round its neck, and separated it with the scissors. The other tumours were not dealt with. There was no hæmorrhage.

A section showed the tumour to be of a fibro-cellular nature, being composed of a network traversing the whole tumour, in the meshes of which was a gelatinous fluid of a yellowish colour. The microscope revealed the delicate fibro cellular tissue, with an abundance of nucleated cells, mostly of a spheroidal shape. Numerous oil-globules were scattered throughout the tumour, but there was no evidence of muscular tissue. The epithelium investing the tumour was of the scaly variety, and no cilia could be detected.



The points of interest in this case are the congenital origin of the tumours, and their unusual situation. As I can find no similar instance reported, I am induced to bring this case before the profession as one worthy of being placed upon record.

Conduit-street, Regent street, Oct. 1863.

JOHN HUNTER.—The profession will be glad to hear that the original painting of this great physiologist, justly considered the *chef d'œuvre* of Sir Joshua Reynolds, and which, like all the productions of the great artist, has been rapidly fading, especially during the last few years, much to the annoyance of the Council of the College of Surgeons, as well as to the admirers of Hunter and Reynolds, has at last been admirably restored by Mr. Farrer, to whom, on the recommendation of Sir Charles Eastlake, it was consigned; and so well has this gentleman performed the important duty, that the President has ordered it to be covered with a handsome plate-glass to save it from the injurious gas and London smoke. The history of this painting is very interesting. Hunter's friends had long been desirous to engage him to sit to Sir Joshua Reynolds for his picture, but he had always hitherto declined to do so, not choosing that it should be done at the expense of others, and thinking the price too high.

# A Mirror
## OF THE PRACTICE OF
# MEDICINE AND SURGERY
## IN THE
# HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum, et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

## ST. GEORGE'S HOSPITAL.

### CARIES OF THE HEAD OF THE HUMERUS; EXCISION; RECOVERY, WITH A USEFUL ARM.

(Under the care of Mr. HOLMES.)

THERE have been five cases of excision of the shoulder-joint within, we may say, a few months. Three of these we record to-day; while the other two are still under observation. A fatal termination ensued in only one, and it was considered as not resulting in any way from the operation, but seemed to depend more upon cerebral disease existing probably long anterior to the disease of the arm. As contrasted with the operation in any other joint, excision of the shoulder is the most successful in its results. Whilst excision of the knee and of the elbow are now almost every-day operations, that in the shoulder is rarely to be seen, for the reason that cases requiring it are comparatively few.

For the notes of the two following cases we are indebted to Mr. F. Woodhouse Braine, surgical registrar to the hospital:—

Robert L——, aged twenty-four, was admitted May 7th, 1863. His usual health was good. He received a blow on the right shoulder about ten months previous to admission. This caused it to be painful for a day or two, and he then forgot all about the occurrence. However, in about two months afterwards, the pain returned, and it has continued to increase until the present time. He is now emaciated, with a hectic spot on each cheek. Pulse 92, weak, but regular. The deltoid muscle over the diseased joint is much wasted, so that all the prominences of the bones can be easily felt. There is a sinus, which discharges freely, opposite the lower end of the bicipital groove. The patient being under the influence of chloroform, an incision four inches in length was made through the deltoid, in the direction of its fibres. The capsular ligament was then divided, and with some little difficulty the head of the bone was tilted out of the wound and sawn off. This incision was preferred to making a flap of the deltoid, there being less likelihood of the circumflex nerve being divided. The hæmorrhage was trifling. Water-dressing was applied to the wound, the edges of which came nicely into apposition of their own accord. The parts were kept at perfect rest by the arm being bandaged to the side. On examining the piece of bone that had been removed, it was seen that the section had been made a little below the anatomical neck; the margin of the articular cartilage was ulcerated, and could be easily separated from the bone, which at one spot was exposed to about the extent of a fourpenny-piece; and here there was a quantity of soft lymph deposited. The articular surface of the scapula was healthy.

May 8th.—The patient has passed a good night; has not suffered any pain in the wound, which looks quiet. To have four ounces of port wine.

10th.—Countenance pale; complains of feeling very weak; had a moderately good night, but perspires very freely. The edges of the wound are red, and discharge slightly offensive grumous pus. A poultice to be applied, and to have tincture of cinchona in effervescing mixture every six hours.

12th.—Wound free from pain, discharging laudable pus. Passes good nights, and perspires considerably less.

16th.—Granulations healthy; wound contracting. He is dressed, and walking about the ward.

During the four following weeks the incision rapidly healed, and his general health greatly improved. He was made an out-patient on June 17th, at which time there was slight movement of the arm on the scapula, and there was no difference in the distance between the acromion process and the point of the olecranon, both sides measuring fifteen inches and a half.

This patient was seen about the end of August; he was then able to abduct his arm to an angle with the body of about forty-five degrees. He was seen again on Oct. 5th. He has no power in the deltoid muscle, although none of its fibres were divided. He can flex the elbow, and has good use of the arm.

### NECROSIS OF THE HEAD OF THE HUMERUS, AND CARIES OF THE GLENOID CAVITY OF THE SCAPULA; EXCISION OF THE SHOULDER JOINT; FATAL RESULT FROM CEREBRAL DISEASE.

(Under the care of Mr. TATUM and Mr. HOLMES.)

George M——, aged thirty-six, admitted April 20th, 1863. In July, 1861, his right shoulder began to pain him, especially after a long day's work. The pain increased, swelling of the joint took place, and an abscess burst opposite the lower edge of the bicipital groove. He then came into the hospital, and, part of the acromion process being necrosed, it was removed. After this he became an out-patient, but was again admitted on the 20th April. On the 8th May a V-shaped incision was made over the deltoid muscle, and a flap formed, which exposed the shoulder-joint. The head of the humerus, in a necrosed condition, was sawn off, and some carious bone scraped from the glenoid cavity. The wound granulated nicely. On the 21st he complained of feeling very low, with slight giddiness. During the next four days he had frequent attacks of retching, loss of appetite, and inability to walk steadily on account of the giddiness. He remained much in the same condition till the 27th, when he had what appeared to be an epileptic fit; this was followed by complete paralysis of the left side of the face and body. He never rallied, and died May 29th.

*Autopsy, eleven hours and a half after death.*—The body was much emaciated. On the right shoulder was an incision shaped like a horse-shoe, which had severed all the integuments excepting a sort of bridge at the top. There was in the middle of the piece of skin thus partially separated a small sinus which led down to bone. The cerebral veins were very full of blood. Under the arachnoid was some excess of clear fluid. There was a minute deposit of apparently recent lymph at the superior part of the right hemisphere (this was extremely small, and might easily have been overlooked). The lateral ventricles contained a moderate amount of clear fluid. All the central parts of the brain were natural, as also the sinuses of the dura mater. The heart was free from disease. Both pleuræ contained a trifling quantity of serous fluid without adhesions. The left lung contained a few small and old tubercles, but the viscera for the most part were natural. In the right lung were also a few minute tubercles; there were, besides, several lumps of pulmonary apoplexy, from the size of chesnuts downwards. A portion of the lower lobe of this lung was in a state of collapse; it was shrunken, tough, devoid of air, and such as to sink in water. The bronchial tubes were injected and red, and contained a large quantity of very thick viscid mucus. This could be squeezed out in abundance from the small tubes in the right lung. The liver was surrounded by adhesions, and the bile-ducts were more than usually full of bile. The spleen contained some small hard tubercles.

## UNIVERSITY COLLEGE HOSPITAL.

### NECROSIS OF THE HEAD OF THE HUMERUS, REQUIRING EXCISION OF THE JOINT; RECOVERY.

(Under the care of Mr. ERICHSEN.)

FOR the notes of the following case we are indebted to Mr. A. Nankivell, the late house-surgeon. Two other examples have lately occurred in the above hospital, in which excision of the shoulder was performed by Mr. Henry Thompson.

Samuel B——, aged forty, admitted June 1st, 1863. Is a healthy agricultural labourer. About two years and eight months ago he noticed a crick in the right shoulder-joint on moving his arm, and could not raise it high up. Pain occurred in the joint, which increased at night. Eleven months ago he was obliged to give up work for nine weeks. In August, 1862, he first noticed a swelling over the inner part of the arm, situated about the junction of the upper with the middle third. This broke in the following October. There was an abundant discharge from the opening. It was poulticed for some time. About a month before admission he had rigors one night in bed, and next morning there was a discharge of a good deal of thick matter; this discharge continued up to his admission.

On admission, there was a sinus on the inner side of the arm, about three inches below the edge of the pectoralis muscle, along which a probe could be passed up towards the shoulder-joint.

June 3rd.—Examined under chloroform. A large steel probe was passed up to the shoulder-joint. No loose bone was felt. On raising and rotating the arm, grating could be felt. Thereupon Mr. Erichsen decided to excise the head of the humerus. A semilunar flap was made, consisting of the deltoid, which was dissected up, and the joint laid bare. The head and neck of the humerus were then cleaned of soft parts, the capsule divided, the arm being at the same time carried across the body so as to displace the head of the bone from the glenoid cavity; the posterior part of the neck was now cleaned, and a copper spatula placed behind the head. Two inches of the upper end of the humerus were removed by Butcher's saw. Some diseased portion of the shaft still remaining, it was removed by means of a gouge and bone forceps. Several arteries were tied, and sutures put in, except at the posterior part of the incision, which was kept open by a piece of lint. Water-dressing was applied, and the arm was bandaged to the side, with the hand in a sling, and resting upon the chest. Two hours and a half after the operation hæmorrhage came on; the wound was undone, and the bleeding vessels secured. At one spot, where a ligature could not be applied, bleeding was arrested by the perchloride of iron. The wound was again dressed, sutures and plaster employed, and water-dressing again applied. Over these a towel was placed, and by carrying a bandage under the opposite axilla firm pressure was maintained. The arm was bandaged to the side, and the patient laid upon his back, with the elbow resting on a small pillow. He was ordered thirty minims of sedative liquor of opium at night. No more bleeding; sickness from the effects of the chloroform.

4th.—Passed a good night; has been sick twice this morning; pulse somewhat weak and intermitting; tongue rather dry; no great thirst. Wound not touched. Ordered beef-tea.

5th.—Feels comfortable; no pain in arm; fingers somewhat numb. On removing the compress, the wound looks healthy. Union by first intention seems to have taken place in a great degree along the anterior edge of the incision; there is some discharge at the posterior part. No bagging in axilla; a little in anterior part of wound, over which a compress was applied. Water-dressing to wound. Ordered fish, milk, strong beef-tea, two eggs, and four ounces of brandy.

6th.—No starting in the limb; fingers not so numb; bowels open; pulse 96. Wound discharges freely; several of the sutures taken out, and several of the ligatures have come away. Dressed as before.

8th.—All the sutures out.

10th.—Going on well; no bagging anywhere; pulse 88.

13th.—Tongue clean; bowels open. The discharge has rather increased in quantity. The posterior part of the wound is healing; the discharge from the middle of the wound is thin and somewhat offensive.

17th.—On dressing the wound this morning a bright blush was seen in the flap; the part is hotter than natural. Patient did not sleep so well last night. Pulse 96; appetite not quite so good. Warm-water dressing still continued, and arm bandaged to side.

18th.—Redness of flap increased, extending from the level of the acromion downwards below the level of the flap. Wound discharges freely, the discharge being thicker than it was. Bowels open; tongue rather furred; some thirst. Brandy increased to six ounces.

19th.—Redness extends to elbow; inner side of arm not much affected. Bowels open; tongue rather furred; pulse 100, rather weaker. Ordered a pint of beer, and five grains of sesquicarbonate of ammonia and tincture and decoction of cinchona every six hours. Warm-water dressing to be applied to the whole arm.

20th.—Patient slept well. Tongue clean; no thirst; pulse 84. Wound discharges freely, especially through the sinus which existed before the operation. The redness extends to the elbow, but not higher up than before.

23rd.—The erysipelas is much less apparent. Pulse 84; tongue clean.

July 1st.—The erysipelas has altogether disappeared. Wound almost healed posteriorly. There is an opening in the lower part of the wound connected with the old sinus, from which there is a considerable discharge. Pressure by means of pads kept up over the sinus.

14th.—Wound healed, except two small sores; still a little discharge from the old sinus.

18th.—Wound healed; sinus closed. Discharged cured.

This patient was seen lately, and found to have a good and useful arm with motion at the joint; but there was some feebleness in elevating the arm, although the use of the forearm was perfect.

## GUY'S HOSPITAL.

### ADDISON'S DISEASE OF THE SUPRA-RENAL CAPSULES WITHOUT MELASMA, FROM RAPIDITY OF PROGRESS TO A FATAL TERMINATION.

(Under the care of Dr. GULL.)

A WELL-MARKED and typical case of Addison's disease, with its characteristic melasma, was recently under the care of Dr. Habershon, which we hope shortly to publish. In the meantime we place upon record another very good example, in which the rapidity of progress of the disease was such that there was not time for the appearance of the discoloration; yet the constitutional symptoms strongly pointed it out before a fatal result ensued. We have taken the following from Dr. Wilks's autopsy register:—

Wm. T——, aged thirty-one, was admitted into Stephen ward on the 27th of Dec., 1862. He was a publican, and, as far as could be learned, had been ailing about four months. He might not have been quite well before this, but he had no symptoms to attract attention. He then began to get weak, pale, and thin. A medical practitioner was called in, who gave him medicines with varying effects, and it was his opinion that he was in a consumption. At this time he often had sickness, and his appetite was bad; he also at times complained of pain in his back. He had likewise various nervous symptoms, which were differently described, it being stated that he had lost sensation on one side of his face, and could not eat so well on that side; also, that he had numbness in his legs, and that he could not perfectly retain his urine. He still continued at his employment. About a month before his death, he became much worse with all the above-named symptoms; and he then went to Greenwich to a friend for change. He there, however, got worse with pain in his back &c., and was induced to send for a medical man. He returned home, but was obliged to ride from the station to his house.

On Dec. 26th, Dr. Gull was requested to see him, and who advised his removal to the hospital. On the following day he came, but was so weak that he had to be carried up to his ward. He then brought up what food was given to him, but rallied somewhat on the following day. On the day after, Mr. Stocker was called to him, and found him dying after having vomited. From this his first visit to the patient he said he did not know whether he was suffering from stomach, cerebral, or supra-renal disease. The man's face was sallow, of a yellowish cast—such as is seen in cachectic persons, but not sufficiently well marked to attract attention. On asking the wife if this were so, she stated that his skin was sallow, but that no one had voluntarily remarked any change of hue. He stated, on his admission, that he had been ill six weeks, this being the time during which he had been incapacitated for business. He died on the 29th of December.

*Autopsy, twenty hours after death.*—Blood was normal. Both of the supra-renal capsules were converted into large masses of an albuminous substance; these being considerably larger than any that had yet occurred in the hospital, and composed also of a material of a much more recent formation than any which had been before observed. They had contracted adhesions to the parts around, as the liver, &c., from which the right one had to be torn; also to the vena cava, which was firmly adherent, and its coats involved. On opening this vessel, there was a raised rough patch where the coats had actually been destroyed, and the disease was penetrating the interior. The diseased organs, or the masses of material which took their place, were not weighed, in consequence of their non-removal from the kidneys; but they probably would have weighed as much as two-thirds of the kidneys themselves, each being about two thirds the size of the kidney to which it was attached. The substance composing the diseased organs was a softish material of a white colour, of the consistence of tallow or lard. It cut with a smooth surface, but was easily friable, and could be rolled up into a mass. It was of the same character as had been met with in previous cases, but not, as in them, associated with any yellow or so-called tuberculous substance or any cretaceous material. In fact, there was no deposit within them indicating that the disease was of any age, but having undergone those changes which time brings about.

The deposit had, no doubt, been formed in a comparatively short period. The diseased masses were so contiguous to, and the material forming them so encroaching on, the surrounding parts, that the semilunar ganglia were more than usually involved. The right one was actually imbedded in the capsule, and many of its nerves passed in; while the left one was in contact, and its nerves merely involved.

## ST. BARTHOLOMEW'S HOSPITAL.

### KELOID DISEASE SITUATED ON THE NAPE OF THE NECK OF A NEGRO, SUCCESSFULLY EXTIRPATED.

(Under the care of Mr. LAWRENCE.)

AN example of this disease, situated at the nape of the neck of a full-grown negro aged thirty-five, was admitted at the end of July into Henry ward. The patient was a native of the West Indies, of a dark-brown colour, and with the peculiar contracted eyebrows and sleepy look common to many of the African race. About two years ago the skin of the back of the neck began to thicken, and gradually increased in thickness until it formed a decided prominence about three lines higher than the surrounding skin. It was nearly three inches long and about an inch and a half wide, and a number of hairs were growing from its surface. Its colour was of a purplish tint, yet it was not easy to determine its real nature from the peculiar colour it possessed on the skin of a negro.

On the 1st of August chloroform was given in the operating theatre, and the patient turned on to his face. Mr. Lawrence then proceeded to remove the disease by an incision beneath and another above, meeting at either end. The most profuse bleeding ensued, as if a dozen large vessels were divided; these were not attempted to be tied until after the removal of the keloid mass. Mr. Holden diligently took up vessel after vessel, which Mr. Lawrence essayed to tie in vain; this occurred some ten or twelve times. Mr. Savory then took the matter in hand, and readily succeeded in placing the ligatures on the divided vessels, although it must be acknowledged that the structures were of such a brawny character that it was somewhat difficult to secure them satisfactorily.

On making a section of the growth, the disease was found to be hypertrophy of the superficial layer of the true dermoid structure, being perfectly white in colour, with the follicles of the hairs situated *beneath* the hypertrophied tissue, which the hairs passed through on their way to the surface.

The process of granulation was slow for some days, when the wound began to contract and to slowly heal up. The patient was up and about the ward when we last examined him—on the 22nd of August, at which time his general health was very good. He subsequently left the hospital quite well.

# Medical Societies.

## MEDICAL SOCIETY OF LONDON.

MONDAY, NOVEMBER 2ND.

MR. E. CANTON, PRESIDENT, IN THE CHAIR.

MR. DE MÉRIC read a paper

### ON THE OCCASIONAL NON-TRANSMISSION OF SYPHILIS TO THE OFFSPRING.

The author brought forward sixteen cases of non-transmission, which were arranged in the following groups:—Seven cases where the father alone suffered from syphilis, the mothers and the children escaping unhurt. Five cases in which both parents were affected with the disease, and the offspring showed no trace of the complaint. One case where both father and mother presented symptoms of syphilis, and the child was born and remained healthy; this case being detached from the last group on account of a peculiar circumstance—namely, the father having been contaminated by the mother *after* conception had taken place. And lastly, three cases in which the earlier children had the disease, and some who were born subsequently did not present symptoms of it. Mr. de Méric commented on these cases, especially as regarded the aptitude to marriage of persons who have suffered from constitutional syphilis. He considered that very consoling conclusions might be drawn from the cases he had offered to the attention of the Society.

Dr. CHOWNE eulogized the paper, and was glad that the occasional immunity of children had, by its author, been made so manifest; he inquired, however, up to what period we could consider the children safe from any attack of syphilis. Dr. Chowne also touched upon the controverted point of mercurial treatment; and afterwards alluded to the non-transmission of the hereditary taint of syphilis by parents presenting severe tertiary symptoms, wishing to know the theory of this exemption.

Dr. GIBBON asked whether Mr. de Méric had examined the children as to the new signs of hereditary syphilis which had been pointed out by Mr. Hutchinson. He also stated that he knew, from actual cases, that when only one of the parents was affected, the child, if diseased, would bear a likeness to that parent; but if it escaped without taint, it would be like the sound parent.

Mr. WALTER COULSON had observed, in his practice at the Lock, that tertiary symptoms of a very aggravated kind were not, as a rule, transmitted to the offspring, and he gave a very striking example of the kind.

Mr. MASON had known several children in a family to die skin-bound, and stated that the medical man in attendance had conceived that this state of things might be owing to hereditary syphilis.

The PRESIDENT favoured the meeting with the history of a case where the shafts of both humeri and the shaft of the thigh-bone had been fractured by very slight causes in a child eight months old, whose parents both suffered from syphilis. He inquired whether this brittleness of bones could be connected with hereditary taint. The President added that those parents saw hardly any improvement in their symptoms; and it was noticed that, notwithstanding this circumstance, the children born after the one mentioned remained in good health.

Dr. O'CONNOR corroborated Mr. Walter Coulson's statements, and some of Mr. de Méric's cases, as to the occasional immunity of children born of tertiary parents.

A Member thought that the immunity of which Mr. de Méric's paper gave illustrations was perhaps not so rare as was supposed, as he (the Member) had attended more than three thousand cases of midwifery, and had not observed any cases of hereditary syphilis.

Mr. DE MÉRIC, in his reply, stated that the time when a child born from contaminated sources could be pronounced beyond the likelihood of an attack of the disease was by no means fixed. He had himself recorded cases, in his Lettsomian Lectures, in which the taint became manifest at from six weeks to ten years; but he was inclined to believe that the late cases might have been contaminated in a direct and not hereditary manner. He was glad to find that others had observed the immunity of children in some cases of tertiary parents; and he would note the fact mentioned by Mr. Mason, of skin-bound children being *thought* to be hereditarily tainted. He would only add that the gentleman who had attended the three thousand cases of midwifery might not perhaps have had an opportunity of watching the children sufficiently long to judge of their ultimate state of health.

## HUNTERIAN SOCIETY.

DR. DALDY, PRESIDENT.

### CLINICAL DATA RESPECTING AMAUROSIS, MORE ESPECIALLY RESPECTING THAT FORM OF IT SUPPOSED TO BE INDUCED BY TOBACCO.

BY JONATHAN HUTCHINSON, ESQ., F.R.C.S.,

SURGEON TO THE LONDON HOSPITAL, ASSISTANT-SURGEON TO THE ROYAL LONDON OPHTHALMIC HOSPITAL, ETC.

THE author stated that his attention had been drawn to the question of the possible influence of smoking in causing amaurosis by some papers which had recently appeared in the medical journals. He had collected together all the cases of true cerebral amaurosis of which he had taken notes during the past four years; they did not comprise all that had come under his care, but most of the more interesting ones. The cases quoted were 65 in number, and were allotted to three groups:—First, cases in which both eyes were affected and the patients were adults (47); secondly, cases in which both eyes were affected and the patients were children (11); and, thirdly, cases of

amaurosis of only one eye (7). The subjoined table will show the relative proportion of the two sexes in each group:—

| | Males. | Females. |
|---|---|---|
| Series I.—Symmetrical, and in Adults: | | |
| Cerebral amaurosis, uncomplicated (idiopathic) | 37 | 3 |
| Ditto, probably complicated or secondary | 3 | 4 |
| Series II.—Symmetrical, and in Children: | | |
| Cerebral amaurosis, uncomplicated (idiopathic) | 3 | 7 |
| Ditto, probably complicated or secondary | 0 | 1 |
| Series III.—Unsymmetrical (all ages) | 3 | 4 |

In this table, all the cases in which there was good reason to suspect that the amaurosis was secondary to other disease were considered as complicated; in the others (idiopathic) he had been unable, on careful inquiry, to discover any satisfactory explanation of the disease. It would be noted that a most remarkable difference in the relative proportion of the two sexes existed in the idiopathic class of the first series, and that this discrepancy was not found in the other groups. Mr. Hutchinson then proceeded to inquire as to how this great disproportion (37 men to 3 women) could be explained. The possible influence, 1st, of different occupations; 2nd, of intemperance; 3rd, of sexual irregularities; 4th, of venereal diseases; 5th, of injuries; and lastly, of tobacco, were severally examined. That occupation had not much to do with it seemed clear from the fact that the patients had followed most various callings; and as to syphilis and intemperance, to neither of these was the male sex exposed in sufficiently disproportionate degree to account for the very different numbers. In only 4 of the whole number of cases was there any history of injury to the head; and in 2 only of these could it be reasonably inferred that the injury had been the exciting cause of the disease. There remained then the possible influence of tobacco-smoking and of sexual excesses. The author stated strongly his conviction that the real explanation of the majority of cases of this form of amaurosis would be found in one or other of these two. Whether tobacco had any share, or whether all should be attributed to the former, he could not say. He wished to abstain for the present from any positive opinion, and simply begged to call attention to the clinical facts. It might possibly prove that, after all, this disproportion in the sexes was a mere coincidence, and that a larger collection of cases would show it to be such.

Amongst the conclusions obtained by analysis of the series of cases, the following are the more important:—In 23 of the 37 cases, it was recorded that the patients had smoked; whilst in 2 it was expressly stated that they had never done so; and in 12 there was no information. In 10 the patients had been intemperate. In only 2 could it be ascertained that the patients had had constitutional syphilis. In 4 instances the sufferers attributed their disease to anxiety. The disease had progressed to absolute blindness in 15 instances; in 5 it appeared to have been arrested; and in most of the others it was either progressive at the last date of notes, or the patient had ceased to attend.

With regard to the probability of sexual excesses having anything to do with the causation of the disease in question, the author stated that in not a few he had obtained the history of failure of sexual power. He had also found that varicocele was a frequent concomitant of this form of amaurosis. Still, on the other hand, in many instances the patients were healthy, robust men, who ailed nothing whatever excepting the loss of sight. In no single instance in the series was there any strong reason for attributing the disease to masturbation. Even if it were proved that varicocele, wasted testes, and loss of generative function were usual concomitants of this form of amaurosis in the male, still the tobacco hypothesis would not be wholly set aside, since the two classes of symptoms might both be due to one common cause. It was remarkable that in almost all the few cases in which the disease occurred idiopathically in females, there was the history of very decided disturbance of menstruation.

Although he felt that there were great difficulties in the way of belief in the tobacco hypothesis,—such, for instance, that many of those affected had smoked only quite moderately; that many had smoked for a long series of years before the amaurosis supervened; that thousands and thousands smoked to great excess without ever suffering from amaurosis; that it was not easy to understand how the tobacco poison could act on one single nervous ganglion alone, the other parts of the nervous system escaping,—still, the author added, he thought there was enough of suspicion in the clinical facts to make it the duty of ophthalmic surgeons to insist on the disuse of tobacco in all cases in which the premonitory symptoms of this disease were presented. The subject was one well worthy of prolonged investigation, and no doubt it would soon be set at rest one way or the other.

In concluding his paper Mr. Hutchinson begged to note the following desiderata:—

1. A much more extended series of cases.
2. More detailed information as to the use of tobacco by those affected by this form of amaurosis.
3. Information as to whether there may not be a considerable proportion of men affected by it who have never used tobacco.
4. Information as to the coexistence or otherwise of varicocele with this form of amaurosis.
5. Information as to whether it ever occurs in women who have smoked. In some countries where smoking is more common amongst women than it is here, valuable information on this head might be obtained.
6. Better knowledge as to whether the course of the disease can in any considerable number of cases be suspended,—1st, by making the patient give up smoking; or, 2nd, by regulation of sexual habits.

The discussion on the subject of this paper lasted over two evenings; we are only able to give brief abstracts of some of the able speeches delivered.

Mr. CRITCHETT, after a few complimentary remarks upon the author's paper, and the industry and accuracy with which he had amassed such numerous cases of amaurosis, went on to observe that two practical and important questions presented themselves for the consideration of the Society in reference to this subject: 1st, Does the amount of evidence we possess at present justify the inference that tobacco is one of the causes of amaurosis? 2nd, Are there any signs by which this form of amaurosis can be diagnosed? As regarded the first point, it was beset with difficulties; but some high authorities in France had long held an opinion that tobacco was a cause of amaurosis, and several cases that had come under his observation had induced him to adopt the same views. It must, however, be admitted that it was exceedingly difficult of proof, and ranked rather as a strong inference than a logical induction. As regarded the second question, he thought the symptoms were rather negative than positive; it was, in fact, the negative character of the symptoms that gave to these cases their distinguishing peculiarities. The persons most liable to this affection, according to his experience, were sea captains between the ages of fifty and sixty; they frequently smoked strong tobacco, and to great excess, although in other respects temperate in their habits. The principal symptom was dimness of vision, steadily and slowly increasing until it resulted in blindness. During the early progress of the disease both the external and the ophthalmoscopic appearances were normal, and it was only during the latter stages that white atrophy commenced and could be made out. From two to three years elapsed between the early stages of the disease and extinction of sight. The prognosis was unfavourable; no recovery of sight took place, but its progress had been arrested in some cases that had come under his notice by the complete disuse of tobacco. He had not been able to trace any beneficial effect from any therapeutic treatment.

Mr. WORDSWORTH, after alluding to the many difficulties investing such cases as the various forms of amaurosis in relation to their etiology, stated that many cases had come under his notice in which he was unable to discover any of the other acknowledged causes of amaurosis, and had been led to attribute the disease to the use of tobacco. He referred to the very general opinion entertained by the eminent ophthalmologists of France, Germany, and the Continent generally, that tobacco is a very prolific cause of blindness, or at least of imperfection of sight. He had published cases which appeared to him typical of the ultimate condition of tobacco-amaurosis, as he considered it desirable to cite well-marked cases. The disease had come under his notice in less developed degrees, all being indicated by changes of coloration of the optic nerves. He considered them so definite and peculiar, that he had no hesitation in stating his conviction that if six patients, the subjects of optic atrophy from various causes, were present in the room, he could undertake to indicate the smokers from the non-smokers. He considered the cases of tobacco-disease of the optic nerve divisible into three categories. In the first the optic nerves were decidedly hyperæmic, and of a dull-red colour. In a second stage the congestion had subsided, and the area of the nerve presented a brownish-grey tint. And lastly, in the third stage, they had all the characters of white atrophy.

Mr. ERNEST HART, in opening the discussion on the second night of meeting, analyzed at length the clinical details of the cases, and referred all but 17 to causes evidently re-

mote from tobacco. The analysis left only 17 as to which he thought that the question could, with any approach to rational inference, be opened, in reasoning from effect to cause—a process which required some logical strictness. But in this number there were still left some typical cases. He quoted one of these at length, where optic atrophy had supervened with only mild cerebral symptoms, such as giddiness, drowsiness, and headache, the patient being a teetotaller, but a great smoker. To these he opposed one or two other histories given where precisely the same train of symptoms existed, but where the patients never smoked; these included two males. He gave a *resumé* of the known causes of atrophy—cerebral, neural, and intra-ocular, and observed that, guessing the cause of optic atrophy to be smoking in any individual, in the face of these cases, where precisely the same symptoms occurred in non-smokers, and without bridging the gulf between the obvious effects of the act and this remote condition, seemed to imply great logical hardihood. He noted that in nearly all these cases the persons were very moderate smokers; in none did the cessation from smoking improve, even temporarily, the condition; that the atrophy supervened at the end of a lifetime, during which the persons affected had been in the habit of smoking moderately without suffering from it; and in one case (No. 45) it was noted that the eyes had been worse five years ago than they were now, notwithstanding that the patient had smoked as much as half an ounce a day during that time. Mr. Hart observed that no one doubted that tobacco contained an alkaloid which was capable of affecting the brain and the nervous system injuriously; and that excessive smoking, which deranged the cardiac action and thus the cerebral circulation, always had been, and obviously must be, admitted into the cause of the etiological conditions which enfeeble accommodative action in the eye, and which might possibly, when abused, rank amongst those acts which so much injure the brain as to lead to atrophy of the nerve of sight springing from it. But the present paper, analyzed with a due regard to pathological connexions, while it fully illustrated the great variety of cerebral conditions under which that atrophy arose, greatly added to the improbability of any ultimate validity being given to the excessive assumptions lately made against tobacco. Mr. Hart observed that no satisfactory indication had been given of the signs by which it was thought that the presumed tobacco-atrophy could be recognised. By candidly furnishing full data Mr. Hutchinson had rendered service to the science of ophthalmology, of which they all equally desired the progress in a right direction. His own interest in the matter lay chiefly in this: that by directing attention to a supposititious cause, and giving an exaggerated importance to the habit of smoking as a possible cause, the central cerebral conditions of congestion, effusion, and degeneration, which must be recognised as active causes in the enormous majority of cases, were likely to be insufficiently regarded, and so the only chances of cure lost in this intractable and severe form of disease.

Mr. SOLLY said that he thought Mr. Hutchinson's communication very valuable. It did not, as the author stated, prove anything positively; but it supported, so far as it went, the views of those who believed that tobacco smoking was prejudicial in a variety of ways to the human frame. He (Mr. Solly) had met with no facts yet to alter his views on that subject. Its injurious effect on boys and young clerks was terrible. The only argument that he had heard in favour of it was adduced by those who found that it assisted them in leading a chaste life; but this very argument—and he believed that there was truth in it—showed how important it was for young married men to abandon it, especially those to whom it was important that an heir to their estate should be born. He was sure that science would be much advanced if the ophthalmic surgeons would continue their observations on this important subject.

Mr. COUPER said we are all agreed that white atrophy of the optic nerve represents the last stage of a great many diseases. It simply means that the conductive function of the nerve has ceased, and does not, if considered apart from its concomitants, point to one more than to another of the very numerous causes of extra-ocular amaurosis. Trustworthy dissections give entire assent to this interpretation; for when the atrophy is of long standing, no primitive fibres are found within the optic nerve, and few, if any, on the inner plane of the retina. That gentle swelling, too, which marks the junction of the retina with the optic nerve, and which is caused by the thickness of the layer of optic nerve fibres at that spot, has wholly disappeared. It is said that the deep red tinge of the nerve-disc characterized the commencement of optic atrophy of this kind; and so it becomes important to inquire if the nerve be ever deeply reddened where there is no amaurosis. Now, syphilitic choroido-iritis generally heightens the pale rose colour of the healthy nerve, and may do so sufficiently to obliterate that marked contrast of colour which is proper to the disc and to the adjacent choroid, and may thus deprive the ophthalmoscopist of the most obvious distinction between those structures. This condition of the nerve finds a parallel in that pink congestion of the ciliary sclerotic which is never absent when the iris or ciliary processes are much inflamed, and, like it, may disappear with the remnants of inflammatory exudation in the choroid. It may, however, endure long after this resorption appears complete to the ophthalmoscope. This Mr. Couper illustrated by reference to a case. Of the large number of cases of amaurosis with white atrophy, few—very few—are actually observed to exhibit antecedent red atrophy. The rare cases in which this sequence is traced usually come with a clear history of some source of prolonged cerebral exhaustion, or of some form or another of sensuous excess. There may have been over-indulgence in tobacco, or there has been venereal excess or hard drinking; and if not these, then there has been abuse of mental application and undue exaltation of the activity of the brain, or exposure to tropical heat. But whatever be the details of the history, the disease usually ends in blindness and white atrophy. The symptoms are best accounted for by the assumption of a chronic inflammation of the nerve-centre spreading along the nerve. In a far more numerous and less explicable group of cases, blindness slowly and almost imperceptibly overtakes men past middle age, and otherwise healthy. The white atrophy does not succeed any antecedent redness, but gradually appears in a healthy nerve. The apparent largeness of the retinal veins is unreal, and is produced by an actual attenuation of the arteries, which plainly transmit less blood than during health. Indeed, so far from there being any real dilatation of the veins, both kinds of vessels dwindle in long-standing atrophy. In the great majority of these cases the cause of the disease is wholly obscure. Should future research prove that nicotine can produce amaurosis, then we are not without a parallel in the case of another vegetable alkaloid which can cause blindness. We may remember that Von Graefe narrates two cases where overdoses of quinine, used to prevent the return of an attack of ague which had been already cured by that medicine, caused sudden and all but complete extra-ocular amaurosis. The speedy recovery of both those cases, after repeated cuppings over the temple, gave birth to the surmise that congestion of the nerve-centre was the cause of blindness.

Mr. HUTCHINSON briefly replied, demonstrating by diagrams the respective appearances which ophthalmic surgeons recognise as indicative of atrophy and congestion of the optic nerve from cerebral as from other causes, and which were also presented in these cases. He laid stress upon the disproportion of sexes, and thought that the influence of sexual causes might suggest the explanation. He had found varicocele to a marked degree in cases which he had examined lately, and where he had looked for it.

## METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

DR. R. DUNDAS THOMSON, F.R.S., PRESIDENT.

MR. LIDDLE brought under consideration the inutility, as a practical measure, of the 67th clause of the 25th and 26th Vict. c. 102, relating to the water supply to houses occupied by the poor. He considered that portion of the clause giving power to vestries and district boards to do the necessary works for obtaining a water supply in cases where the landlords refused, to be especially defective. He compared the great powers given by the 64th clause with those of the 67th, and proposed that a communication be made to the Home Secretary on the subject.

Mr. BURGE pointed out another evil in the clause—namely, that it referred only to places where water-mains were laid down. He thought it should apply to any place where a supply of good water could be obtained.

Dr. BALLARD thought the clause referred to had been by no means inoperative, many landlords having laid on water under its provisions. The former course, by application to the churchwardens and overseers, had been very clumsy and ineffective.

Dr. LANKESTER suggested that the water companies should be compelled to give a supply on Sundays.

The matter was then referred to the General Purposes Committee.

A letter was read from the Royal National Life-Boat Insti-

tution, referring to Dr. Marshall Hall's method for the restoration of the apparently drowned, and a modification proposed by Dr. H. R. Silvester; and asking the opinion of the Association on their relative merits. Dr. Silvester was present, and illustrated his plan on a boy. It consisted in laying the patient on the back, slightly raising the head and shoulders, drawing the tongue forwards, and keeping it so by passing an elastic band over it and under the chin. The arms are then grasped just above the elbows, and drawn gently upwards until they meet above the head (this is for the purpose of drawing air into the lungs), keeping the arms in that position for two seconds. The patient's arms are then turned down, and pressed gently and firmly for two seconds against the sides of the chest (this is for the purpose of pressing the air out of the lungs). Artificial breathing is thus carried on. These efforts are to be repeated fifteen times in a minute, until a spontaneous effort to respire is perceived. During the employment of these means, excite the nostrils with snuff or smelling-salts, or tickle the throat with a feather. After natural breathing has been restored, warmth and circulation are to be induced by wrapping the body in hot blankets, applying bottles or bladders of hot water, heated bricks, &c., to the pit of the stomach, the armpits, between the thighs, and to the soles of the feet, and by rubbing the limbs upwards firmly and energetically.

In the discussion that followed,

Dr. GIBBON said that he considered Dr. M. Hall's plan more simple, which in three cases he had himself successfully tried. One of these was a person apparently drowned, one a case of poisoning by opium, and one by chloroform. He thought Dr. Silvester's plan inapplicable to stillborn children.

The PRESIDENT remarked that treatment was more generally successful in cases of poisoning by opium, chloroform, or spirits, there being less struggling than in drowning, which was the most fatal cause of asphyxia. It had been found that death from plugging the trachea took place in four minutes, whilst in drowning it took place in a minute and a half.

Mr. LIDDLE inquired how long the treatment should be continued.

Dr. SILVESTER said that eight hours had been occupied in the treatment with success. He had often saved stillborn children. He did not consider Dr. M. Hall's plan free from danger, as in one instance the neck of an adult had been dislocated during the treatment. He believed his (Dr. Silvester's) method would stand the test of experience, and prove a great boon to humanity.

The thanks of the meeting were unanimously voted to Dr. Silvester.

A paper was read, from Dr. Buchanan, on the "Increasing Prevalence of Typhus Fever in the Metropolis." In it he stated that this disease had been epidemic since December, 1861; that on the 31st of August last there were in the Fever Hospital 80 patients, a considerable portion of whom were suffering from diseases other than typhus fever. At the end of September there were 134 patients, the whole of the increase being due to typhus; and by Oct. 12th there were 180 patients in the hospital, who were all (with some 30 exceptions) suffering from typhus fever. The patients had been chiefly brought from the poor districts of the south and east of London, and they all belonged to the very poorest class of people. The number of patients admitted into the hospital in September suffering from typhus was 97; from typhoid, 22. From the 1st to the 20th of October there were admitted suffering from typhus 103; from typhoid, 11.

This paper, as well as the communication from the National Life-Boat Institution, was referred to the General Purposes Committee.

# Rebiews and Notices of Books.

*On Australasian Climates, and their Influence in the Prevention and Arrest of Pulmonary Consumption.* By S. DOUGAN BIRD, M.D., L.R.C.P.L., Physician to the Benevolent Asylum, Melbourne. pp. 168; with Illustrations in Chromolithography and on Wood. London: Longman and Co.

THE advantages of a voyage to Australia in cases of consumption have long been recognised. By starting about the middle of October, and returning before the antipodal winter sets in, the invalid may enjoy the luxury of a perpetual summer all the year round. As regards the climates of the great Australian continent, however, we have hitherto been without any precise information. Beyond a general idea that it was a country of sheep, kangaroos, gold-diggers, wild cattle, and still wilder bushrangers, our notions of the great colony have been rather vague. Of its influence upon consumption we have heard little or nothing, and there are few who have not been anxious for some precise intelligence. We are indebted to Dr. Bird for a work which not only supplies this information, but gives us an insight into the present condition of Australia, which cannot fail to be read with the greatest interest. As regards the statistics of disease, the following will be read, we think, with some surprise as well as pleasure:—

On the Australian continent the deaths per 1000 of our troops are 11, in New Zealand only 8½, as against 28 in the Ionian Islands, 30 at Bermuda and the Mauritius, and 17½ in the United Kingdom. In 1860-61-62, at the penal establishments near Melbourne there was an average mortality of only 5 per 1000—far lower than that of any other establishment of a similar kind in the world.

"In the British Islands, 40 per cent. of the annual mortality at all ages is caused by disease affecting the respiratory organs—that is to say, pulmonary consumption, bronchitis, pneumonia, pleurisy, hydrothorax, asthma, quinsy, and laryngitis; while the same diseases, on an average of six years, from 1854 to 1860, caused in Victoria only 15 per cent. of the total mortality at all ages."

Confining ourselves to the several varieties of the tubercular order, we find that in 1861 (an unusually wet year) only 434 deaths were registered as occurring from this cause—that is to say, about 12 per cent. of the total mortality. In Europe, pulmonary consumption alone causes about 20 per cent. of the whole mortality. In Melbourne, this disease caused, in 1861, rather over 7 per cent. of the whole mortality. These, however, were town statistics. Dr. Bird believes that "the deaths from pulmonary consumption in the colony at large are probably not more than 4½ or at the utmost 5 per cent." of the total mortality.

The following needs no comment:—

"In the Immigrants' Aid Society's Home at Melbourne, with which the writer is officially connected as consulting physician, there are maintained an annual average of 400 children, from birth to thirteen years of age. The greater part of these are the offspring of the very dregs of the colonial population. Five-sixths of them are Australian born. During the last twelve months there has been no case of infantile phthisis, only one of tabes mesenterica, and one of disease of the brain of tubercular origin. No case of scrofulous disease of bones or joints has occurred, and hardly any of enlargement or suppuration of the lymphatic glands."

The author ascribes the salubrity of the Australian colonies to the characteristics of the climate and "the altered circumstances and habits of the population at large, which, also, are greatly dependent on the climate." Contrasting the southern and western coast of England with the climate of Victoria, he says, "the former is moist, cloudy, and relaxing, while that of Victoria is dry, sunny, and stimulating." One of the great characteristics of the climate of Victoria is the small mean annual range of its temperature. From observations made in Melbourne in the years 1860, 1861, and 1862, it appears that the greatest heat recorded during the day was 78°, and the greatest cold 46°. Whilst the average summer heat is only 4° higher than that in London, the lowest temperature ever experienced in winter, and that very rarely, is 32°. One can readily conceive this to be a climate peculiarly adapted for the permanent residence of a phthisical patient, with a marked superiority over that of our most esteemed winter resorts of Southern Europe, which, grateful and salubrious though they be in winter, are intolerable in summer.

From his description, coupled with what we have derived from other sources, it would appear that there is a peculiar exhilaration attendant upon life in Victoria—something probably of that sensation with which all who have "gone high" in the Alps are familiar, and which was once eulogized by an

enthusiastic Frenchman in the remark, "Le sentiment de l'existence même est une sorte d'ivresse." The progress of the colony of Victoria has been so marvellous during the last few years that there is nothing now in the state of society or mode of life to deter an intending settler. In 1836 the census showed a population of 177; in 1861 this had risen to 540,322! At the present time Melbourne is supplied with all the comforts and refinements of a highly civilized city. The arts flourish; law, order, and morality are observed at least as well as in England, whilst the energy shown in the construction of public works and institutions might serve as an example, in some respects, to the mother country.

We would direct especial attention to a chapter upon Colonial Life and Scenery towards the close of this volume. In it the author displays a power of graphic description which is by no means common. Alternately excited and amused by the pictures which he gives us of the England which lies under our feet, though 15,000 miles away, we are led captive, until, as we close the book, the conviction takes strong hold of us that, were we suffering from incipient phthisis, it would take much to prevent our testing personally the truth of what he narrates so pleasantly.

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*On the Immediate Treatment of Stricture of the Urethra by the employment of the "Stricture Dilator."* By BARNARD HOLT, F.R.C.S., Senior Surgeon to the Westminster Hospital, late Lecturer on Surgery in the Westminster Hospital School of Medicine, &c. 2nd Edit., pp. 110. London: Churchill.

THE "immediate" plan of treatment of stricture of the urethra has attracted not a little attention during the last few years both in hospital and private practice, more particularly since the publication of Mr. Holt's work two years ago; and the profession generally will be glad, therefore, to be informed of the author's further experience of the proceeding he advocates. Mr. Holt's first preface spoke modestly of a "hope that, should he be fortunate enough to express himself so clearly as to be generally understood, the performance of the operation might become extended;" and this hope seems to have been fulfilled, since the names of Messrs. Fergusson, Paget, Curling, and others in this country, and Macnamara and Smyly in Ireland, are mentioned as having successfully operated by the author's method.

The principle of Mr. Holt's operation is to split the mucous membrane and the thickened submucous tissue forming the stricture by means of the "dilator," an instrument somewhat resembling a split catheter of small size, with a guiding rod, on which a tube can be introduced, of such a size as to make the instrument of the full calibre of the healthy urethra, and thus of necessity rupture any stricture, wherever it may be situated. This rapid method is certainly rather alarming to those who have been duly impressed with the doctrine "festina lente;" and on first witnessing it one is apt to look forward despondingly to extravasation of urine with all its untoward consequences. Experience, however, has shown that the *strictured* urethra can bear great liberties; and it is no small thing for the author of any operation to be able to record two hundred and fifty cases without a fatal result—as Mr. Holt now does.

Since the publication of his first edition, Mr. Holt has made an improvement in his instrument which is of the very greatest consequence. No surgeon would like to dilate forcibly a urethral obstruction unless it were quite certain that his dilating power would be applied in precisely the right direction, since the results of any error must be most disastrous. Yet it was by no means easy to ascertain with certainty that the dilator had reached the bladder, since there was no provision in the old form of instrument for the passage of urine through it; and the recent conversion, therefore, of the guiding-rod of the dilator into a catheter, through which the urine may pass, and thus demonstrate the right direction of the instrument, will be at once recognised as a great improvement. The whole of the apparently formidable and yet simple operation cannot be better described than in the words of Mr. Holt:—

"The dilator, having been previously well oiled, is to be introduced with the handle somewhat over the patient's left hip, and by keeping the curved portion gently pressing against the under part of the urethra, the point will glide along the upper portion until it is fairly beyond the triangular ligament, when, by bringing the handle to a right angle with the body, and gradually depressing it,—but not so much as in the passage of an ordinary catheter,—it will usually slip into the bladder; in fact, the same proceeding is to be adopted as in introducing a lithotrite for the purpose of crushing a calculus. The stilette in the perforating guiding-rod is now to be withdrawn, when the urine will flow, and being thus assured that the instrument is in the bladder, the surgeon is next to place the point of the tube he has previously selected upon the wire between the blades, and thrust it as quickly as possible onwards to the end. By this means the stricture will be fairly split, and not dilated, the former effect being absolutely necessary to obtain the best results. The dilator should now be rotated to separate still further the sides of the rent, and then withdrawn; a catheter corresponding to the number of the tube being substituted for the purpose of removing the urine. The catheter is then to be taken out, and the patient sent to bed, with directions to take, every four hours for the first day and night, a mixture containing in each dose two grains of quinine and ten minims of the tincture of opium."

We are glad to see that Mr. Holt is too sound a pathologist and too honest a surgeon to maintain that his operation will *cure* a stricture without after-treatment; but he shows that the treatment is much shorter and far more satisfactory after the employment of his instrument than by the ordinary methods. He advises that the full-sized catheter should be passed on the second day after the operation, and every other day for a week, and then at gradually increasing intervals until once in six or twelve months, according to the nature and severity of the stricture, is found to be sufficient to maintain the full calibre of the urethra.

Some of the illustrative cases quoted in the work are very remarkable, one of the most so being that of a gentleman who had twice undergone perineal section (once by Mr. Syme himself), and had also had internal urethrotomy performed, from which he nearly lost his life, and at the end of all the treatment was obliged to use a No. 2 catheter whenever he desired to empty the bladder. This patient's extremely dense stricture was "split" by Mr. Holt with the best results, and without a single bad symptom! Several other cases of equally or even more complicated stricture are recorded, and their treatment appears to have been uniformly successful. The whole tone of the work is so simple and earnest, and the good effects of the operation have been so satisfactory in the hands of other surgeons besides the inventor, that there can be no doubt that the operation is now a legitimate and recognised one in surgery. The author says in his preface—"So strong is my faith in the operation, that I have no hesitation in affirming that surgeons *must* adopt it;" and we believe he has every ground for his opinion.

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*The Surgical Diseases of Children:* being the Lettsomian Lectures delivered before the Medical Society of London, March, 1863. By THOMAS BRYANT, F.R.C.S., Assistant-Surgeon to Guy's Hospital. London: Churchill and Sons.

WHEN these Lectures were first delivered, we published some extracts of them in the pages of THE LANCET. In their fuller form they amply sustain the credit of Mr. Bryant as a painstaking, careful clinical observer, and sound bedside practitioner. We recommend the perusal of the book by all young surgeons in general, and by those in particular who are attracted towards pædiatrics.

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SURREY COUNTY HOSPITAL. — The Committee of the Surrey County Hospital, now in course of erection near Guildford, have received more than £1000 from the thankoffering collections in the various parishes.

# THE LANCET.

LONDON: SATURDAY, NOVEMBER 7, 1863.


THE importance of the views propounded by the President of the Sanitary Section of the Social Science Congress in the address which we have published in our two last impressions is very great; we could wish that they were of equal soundness. Dr. CHRISTISON is the first medical man who has presided over the Public Health section of the Association. Physic was honoured (and not before it was time) in the election. Admitting that it is not indispensable that every inquiry concerning public health should be carried on by the physician alone, Dr. CHRISTISON nevertheless holds the catholic doctrine that the closer the bond of union is drawn between medicine and public health, the better will it be for the stability of the latter branch of knowledge. But he laments that this truth has been sometimes lost sight of lately. If, indeed, we were to assume that, starting from this stand-point, Dr. CHRISTISON was wishful to teach amateur sanitarians a lesson of humility, his address might be regarded as a masterly example of irony, of which a fitting parallel may be found in Dean SWIFT's dissertation "On the Original, Use, and Improvement of Madness in a Commonwealth." The reader who regards it as a grave exposition of matured opinions is plunged into a maze of inconsistencies and contradictions; and Physic must, we fear, perforce, despite its just reverence of Dr. CHRISTISON, repudiate his opinions on this subject, and decline to accept his statements of the present position and prospects of sanitary science.

Dr. CHRISTISON proposed to show what had already been done and what remained to be done for lessening the prevalence of the principal diseases or groups of diseases influenced by the chief agents which affect public health, and the mortality, ill-health, and pecuniary loss arising from them. What he actually did was to argue that all improvements in the public health were entirely independent of what has already been done! The Association holds in high favour the statistical method of investigation, and gives express preference to papers based on statistics. Dr. CHRISTISON maintained that "in questions relative to public health, the statistical method of settling them may be quite as open to fallacy as any other;" indeed, under some circumstances, "even more fallacious than any other." Equally paradoxical was his treatment of particular subjects. Ague once upon a time prevailed in Scotland, but the disease, he averred, died out without waiting for improved systems of drainage and agriculture, or the interference of Government, the College of Physicians, or even the Social Science Association. Scotland has its marshes and marshy lands, not a whit less creditable than those of other countries, but no ague. If ague still haunts English marshes, so much the worse for England; but is it just to blame the marshes? Typhus and typhoid fevers may exhibit an affection for overcrowding and bad drains in London, but they are utterly indifferent to these conditions in Edinburgh. There, at least, so far as these fevers are concerned, bad drainage is a delusion, foul air a myth. And these national peculiarities—for how else can we term them?—are not confined to epidemic diseases; for Dr. CHRISTISON states, in effect, that even tubercular maladies in Scotland have not that intimate alliance with the internal condition of houses and workshops observed in England! We do not invent, we simply recount. Dr. CHRISTISON's positions will remind many of the civilian disputants in the celebrated discussion on the nose of SLAWKENBERGIUS, whose objections, if anything, proved that the subject in debate was neither true nor false.

Let us analyze a little his basis of facts. And first of the Scottish mortuary statistics. It is true that the registers of death are imperfect, and that the Association might perhaps usefully aid in obtaining their amendment. We would ask, however,—to deal simply with the practical question submitted by Dr. CHRISTISON, and avoid a profitless discussion on the general value of statistics,—what incentive has the Association to act in the matter when they are also taught that the statistical method of investigating questions of public health is quite as open to fallacy as any other method, and in some instances is even more fallacious than any other? Of course, it is often good policy to make the best of a bad thing; but here, we apprehend, the true question is to make better a good thing. For, after all, the Scottish registers furnish information concerning the mortality of the kingdom and of its different districts, as well as of the chief categories of disease, which it is difficult to conceive could be obtained in any other manner. If this information does not altogether meet scientific requirements, at least it facilitates or suggests inquiry, or is a necessary complement of investigations pursued upon some other method. Dr. CHRISTISON admits that the information furnished by the registers on the two classes of diseases which most immediately concern the public welfare—the zymotic and tubercular—is sound. But, curiously enough, although he dwells at some length on the comparative mortality from the latter class of affections in town and country districts, and draws important conclusions as to the agencies mainly employed in fostering their excessive mortality in the former districts, he makes no reference to the comparative statistics of zymotic diseases and their special significance. Yet there is a peculiarity in these that might profitably have occupied the attention of the Association for a short time.

Dr. CHRISTISON pointed out the remarkably low average mortality of Scotland as compared with any other kingdom in Europe. But he did not point out that, notwithstanding this low rate of mortality, the deaths from zymotic diseases during the three earlier of the four years' registers which have hitherto been subjected to detailed examination, were greater in proportion to population in Scotland than in England. Further, he did not notice the very important differences observed in the mortality from these maladies in town, mainland-rural, and insular districts. The observations of Dr. STARK on the difference of prevalence noticed in zymotic diseases during the period referred to in England and Scotland deserve to be quoted. He says:—

"Anyone who is familiar with the houses of the lower classes in the large towns, and the cottage dwellings of the inhabitants of the small villages and of the rural population in the two countries, will probably have no difficulty in convincing himself that no other result than the above indicated could have been anticipated. The more cleanly habits of the people of England, their less crowded dwellings, their better ventilated rooms, the absence of the filthy miasmatous pool

before their doors, perhaps also their abundant diet, would, to the sanitary inquirer, sufficiently account for the much less prevalence and fatality of epidemic diseases among the inhabitants of England, and would serve also to indicate in what direction our efforts should be made in order to increase the health and lengthen the life of the inhabitants of Scotland."*

Dr. Christison allows that "according to all recent experience, general no less than statistical, it is certain that much may be done, under the will of Providence, by human wisdom and human means to lessen" the ravages of zymotic diseases. As to the fashion of doing this, he suggests, however, many grievous doubts. Indeed, notwithstanding this hopeful view, it is questionable whether, according to his showing, human agency will avail much, if anything, in bringing about the desired results. Ague, for example, once prevalent, has now disappeared from Scotland. But, Dr. Christison states, somewhat vaguely, that this occurred before the introduction of "improved" or "extensive" drainage. Again, ague is not known in the vicinity of the peat or artificial marshes of Scotland. Dr. Christison suggests that the subject is one respecting which the Association might usefully call for information. We should be loth to interpose an obstacle in the way of the Association undertaking so interesting an inquiry, but we should expect that any little mystery attaching to the uninvestigated causes of the disappearance of ague in Scotland can hardly be allowed to set aside the well-ascertained fact of the disappearance of ague and remittent fever in our colonies in proportion to the extent of cultivation and drainage. It is, however, a gratuitous assumption of Dr. Christison to argue as if it were the prevalent medical opinion that *all* marshes were productive of ague. No fact is better established than the freedom of peat-bogs and of certain other marshes, both in the temperate and tropical zones, from ague. If the Association can help us to an explanation of these exceptional facts we shall be grateful; but we would suggest to North Britons that, notwithstanding Dr. Christison's doubts as to whether ague follows the same laws in Scotland as elsewhere, it would be best to adopt southern practice and opinion in respect of the disease when they have crossed the Tweed or emigrated to distant lands.

Dr. Christison is hopeful that in the fulness of time Scotland may be delivered from continued fevers as well as from ague. Let not sanitarians, however, take any credit to themselves for bringing about this most pleasant possibility. Neither depurated air, nor improved drainage, nor cleanlier habits of the population, according to Dr. Christison, have been influential in producing that diminished prevalence of continued fevers in Edinburgh on which he bases his forecast. "These things are all very well in their way," he says in effect, "and to be commended, but in seeking them we shall in nowise extinguish fevers. The cause of the latter wearing out is, in my opinion, occult; but be this as it may, they can never prevail in an epidemic form in face of employment for the working classes and ventilation of their dwellings." It is not easy to reconcile the former with the latter opinion, neither, perhaps, is it necessary.

Now Dr. Christison recognises in his address four different forms of continued fever—inflammatory fever, typhus, gastric fever, and enteric fever. Respecting inflammatory or relapsing fever (although repudiating the latter designation) he is in accord with the best English authorities, but respecting typhus a curious error vitiates his observations, and which is not unimportant in estimating the general tendency of the address. The term typhus is used in both the Scottish and the English Registers as the common designation of continued fevers. Dr. Christison uses the term, not only in this sense, but also in the sense of typhus proper. Hence well-nigh inextricable confusion. He avers that seldom does a week pass without one or more deaths from typhus appearing in the Register in Edinburgh. He here employs the term as a common designation of continued fever, for Dr. W. T. Gairdner has shown that there may be long intervals when typhus proper is not observed in that city. Dr. Christison also alleges that in non-epidemic periods typhus is met with amongst the rich as well as the poor, and, perhaps, in as great a proportion to their relative numbers. Here a like error is committed, for Dr. Gairdner has also shown that in 1858 and 1859, when only sporadic cases of typhus proper occurred in Edinburgh, *all* of them happened amongst the very poorest of the population. When Dr. Christison states that nothing is known of the origin of typhus in non-epidemic periods, he not only ignores the great body of evidence which has been collected on the subject, but even ventures to neglect the recent striking illustration afforded by the outbreak at Preston. When he deprecates the idea that it may be generated by "foul air," he confounds different forms of foul air under one common term, just as he confounds different forms of continued fever under a common designation; and when he maintains that no one ever heard, at least in Edinburgh, of the spread of typhus in an epidemic form being referable to an increase of foul air, apart from the resulting concentration of infectious effluvia from those ill with the disease, he sets aside the history of "gaol fever," of "ship fever" (particularly of the recent case of the Egyptian frigate at Liverpool), of typhus in the Crimea, and that in the American armies at the present moment. His observations in reference to drainage in the case of relapsing fever and typhus are beside the mark, for neither the one nor the other is attributed to bad drainage. Finally, when Dr. Christison uses, in reference to typhus in Edinburgh, the expression, "perpetual pestilence," it might be inferred that in former years the prevalence of typhus in Edinburgh varied but little from year to year. But the truth is, that the disease has always prevailed in the epidemic form, and Dr. Christison's own remarks readily explain why, since the last epidemic, the diminution of typhus has been greater than in the interval between any two previous epidemics. The last epidemic of 1847–49 was due to the Irish potato-famine, and to the immigration of multitudes of Irish. The cause was too great and protracted to be at once checked by the "cleansing of the fever districts," but as soon as the extraordinary cause ceased to operate, then the greater attention to sanitary matters produced results never before equalled. If, as Dr. Christison asserts, the present disappearance of typhus from Edinburgh be due to "a change of type or constitution of epidemic diseases," how are we to account for the great epidemic of typhus in London since December, 1861?

Dr. Christison is not more fortunate in his remarks on enteric fever. There is no evidence that the disease has increased in London contemporaneously with the increase of drainage as he would imply, and its presumed increase in Edinburgh since the drainage of that city is susceptible of an expla-

* Third Detailed Annual Report of the Registrar-General for Scotland, p. xxxv.

nation less creditable to the city than the drainage. Before the introduction of drainage into many parts of Edinburgh, the excreta used to be carted off by the scavenger; but it is notorious that since the introduction of drainage, with drains opening into the *interior of houses, there has been a deficient water-supply*. It is possible that the connexion between fæcal fermentation and enteric fever may not be such as Dr. MURCHISON holds, but at least Dr. CHRISTISON has advanced no sound argument to the contrary. It is certain, moreover, that there is an intimate connexion between the fever and drainage which practical men cannot afford to neglect. It is idle to object that this connexion cannot be traced in all instances. We cannot at all times trace even small-pox and scarlatina to contagion, but would Dr. CHRISTISON argue from this that scarlet fever or small-pox is not contagious?

What, then, is the practical conclusion to which Dr. CHRISTISON would lead us? It is this, that the epidemic prevalence of continued fevers is dependent upon the condition of labour amongst the working classes, and the ventilation of their dwellings. Provide work for the unemployed, he says, and obtain from them in return due ventilation and cleanliness, and epidemics will vanish. But the ventilation and cleanliness to which he refers are not altogether the objects after which the ordinary sanitarian seeks. He suggests these means solely as a mode of destroying infection, fever being present. Is it, then, come to this, that medicine can see no greater hope of good from sanitary science in the prevention of continued fevers than such as may be derived from striving after the most impracticable measures? Well may Dr. CHRISTISON ask despairingly, if such be the case, "How is work to be got in hard times for the unemployed? And still more, how are the labouring classes to be taught the habit of ventilating their apartments?"

Not a whit more satisfactory or practical are Dr. CHRISTISON'S suggestions respecting the prevention of tubercular diseases. Ignoring entirely the elaborate and invaluable inquiries of Dr. GREENHOW into high local death-rates from lung-diseases in different districts of England, and Mr. SIMON'S important and eminently practical deductions on the probable influence of improved ventilation and the restriction of overcrowding in factories and work-rooms in diminishing these affections, Dr. CHRISTISON has no better or more feasible suggestions to offer than "the spreading out of a city, the finding lungs for it in the shape of parks and gardens, the surrender to the working classes, and, above all, to the sedentary trades, of a proportion daily of that time which is now too entirely demanded of them for the toils of their craft, and the creation among them of a taste for the active exercises which were the pastimes of their ancestors." We do not for a moment question the desirability or value of these changes, if they can be obtained; but it is evident that at the best they can but partially meet the evil, and that they in no sense meet the immediate necessities of the case.

Has Medicine, then, so little confidence in sanitary science that it can suggest nothing else but doubts as to its value, and offer impracticable hints for its guidance? It would be folly to attempt to answer this question seriously. The weakness of Dr. CHRISTISON'S suggestions and conclusions is a necessary consequence of the looseness of the facts upon which they are based. Every step which medicine has made in advance has served to confirm the great truths of sanitary science and to strengthen the hands of sanitarians. If it has been necessary to reconsider and modify from time to time its conclusions, the apparent loss of ground in one direction has been invariably more than compensated in another.

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THE Central Criminal Court is the monthly journal of our metropolis, wherein the public learn the latest fashions of crime. Scarcely a session passes without some revelation exceptional in its character. Either old offences concealed in new disguises, or new offences devised by old experience, show the active ingenuity of the criminal mind. If half the ability and perseverance expended in planning and carrying out many schemes of fraud were devoted to any honest calling, the majority of those who stand in the felon's dock would prove not only well-to-do but useful members of the community. A case was tried last week forcibly illustrative of this view, and at the same time exhibiting the extraordinary ease with which the public may be taken in, especially when they seek to avail themselves of privileges which offer to them facilities for possible deception in return. The "Perseverance Life Assurance and Sick Fund Friendly Society" was a model company designed for the benefit of operatives. It professed to offer most liberal terms to the working classes who became its clients. Its first principle was one of mutual confidence. "We, the Society, will accept as true all that you, the public, choose to tell us; and you must extend to us the same implicit reliance. We dispense with medical examinations, which are the basis of every legitimate assurance; and you abstain from any scrutiny of accounts, which alone can test the honesty of our dealings." This appears to have been the nature of their agreement; and this the working public seems to have accepted. The sequel was not unusual. The whole affair proved to be a contemptible swindle, the liberal directors so many rogues, and the confiding policy-holders self-constituted victims. The first claim exploded the fraud. The question then arose who was to be visited with its blame. In this case it appears from their own admission that the authorities appointed for the supervision of such associations imperfectly discharged their duties. It seems that no balance sheet of the Society's accounts had been forwarded to the Registrar's office for three years; and when sent in, it was audited by the son and brother of the originators of and principals in the scheme. It was stated that the Society started with "a very good set of rules," duly certified by Mr. TIDD PRATT. We have mentioned one of them, which came out in the course of the trial, and are content to limit our observations to its importance. We do not hesitate to affirm that for the safe operation of all such societies the guide for action must be medical opinion. If this be true, how immense is the responsibility which devolves on members of our profession—how extensive is their sphere of usefulness and supervision. It was stated that 21,000 Friendly Societies exist in this country. Their objects are various, and generally suited to the many requirements of the operative classes. The most important of these are, assurance against death and provision for relief or maintenance during sickness. The only reliable guide for the first is the careful medical examination of the applicant. The principle of life assurance is one of calculation based on the relation of facts to statistics. The facts entering into the consideration of every policy are those that appertain to, and those which rest in, the individual. The former include the

nature of occupation, personal habits, constitutional predispositions, and general state of health; the latter, the time of life and physical condition of the applicant. These being ascertained, the proposition becomes one of algebraic equivalents capable of being calculated with the utmost precision. Medical examination alone is authoritative in the latter, and can be no more dispensed with in the assuring of a life than can a compass in the safe guidance of a ship. It is true that in both cases the venture might be accomplished without accident; but we may assume that no man of common sense would therefore argue that it was desirable in either instance to renew the attempt. The only inference which the indifference to medical opinion on the part of "the Society" permits is, that the scheme was from the commencement a fraud, and could never have been otherwise designed. This must suggest itself to the most limited experience in such matters, and, to our mind, ought to have satisfied the authorities as to the true nature of the undertaking. There is little doubt that to many this "liberality" on the part of the directors was most opportune. Mrs. LITTLEJOHN, for instance, probably considered, when she insured the life of her husband, who shortly afterwards died of rapid consumption, that she had accomplished a clever stroke of business. She knew not what "liberality" under such circumstances implied—that it was but another name for recklessness, which in all transactions of the kind means failure. It so turned out, and the truth was proclaimed with less reserve than usually marks such revelations. It is true that all this occurred in a small way of business, and that each one of those concerned was a miserably low impostor; but the teaching which it conveys is not the less applicable to all Provident Societies, no matter how ambitious their range. The principle of conduct this illustration suggests is not inapplicable to the most extended assurance companies whose funds are numbered by millions. It is this, that the public must ever regard with suspicion all those "unusual facilities," "extreme liberalities," and disregard of prudent observances, which, in this age of active competition, companies who cater for popular support are too prone to indulge in. We consider that in the matter of life assurance complete and reliable medical information is absolutely essential for even an approximate estimate of the terms of the contract between insurer and insured, and do not hesitate to point with confidence to the returns of those companies known to be most particular in this respect. This opinion is now generally entertained. With few exceptions, assurance companies regard members of the medical profession as the arbiters between them and the public, and duly recognise the importance of the services they render.

While the number of Friendly Societies which exist is an unanswerable argument in proof of the prudent care for the future which distinguishes the majority of our well-conducted artizans, it is also an illustration of the vast confidence necessarily reposed in members of the medical profession. Each of these societies has its medical attendant, whose certificate determines the propriety of the claim which is advanced by any member on the ground of sickness or inability for work. With the medical attendant rests the decision as to whether illness be protracted beyond actual convalescence, and also frequently the amount and nature of the relief and assistance to be afforded. It is through these societies that medical practitioners become, as it were, part of the working machinery which regulates the social happiness and comfort of the operative community; they thus also are afforded infinite opportunities for accomplishing practical good. To the members of no other profession are similar privileges extended; by the members of no other profession is so much unrequited exertion for the public benefit undertaken. True, these societies pay their officers small sums annually for their supervision; but such remuneration forms but a fraction of their real recompense, which rests in their consciousness of being the instruments of much private as well as public good.

That societies of so much importance should be the objects of special care on the part of the State is but proper. The knowledge that they are so contributes much to the confidence reposed in their stability, and materially extends their usefulness; in the same proportion does it impose on those to whom the duties of supervision are entrusted the necessity of their active and complete investigation. The mechanic who pays his weekly contribution to a Provident Society which he knows to be sanctioned by the law, in a manner accepts the guarantee of the Government for the security of his investment. He is, in the majority of instances, incapable of rightly estimating or investigating the accounts "open for his inspection;" but knowing that an official "Registrar" has authority for the purpose, he considers that authority and duty are identical, and so rests satisfied with the matter. What, then, must be thought of the observation of Mr. TOMKINS, who attended as a witness from the Registrar's office, that "the secretaries of Friendly Societies constantly evade the law by sending in no balance-sheets?" This is a grave admission, and is one which ought to be attended to. The evasion is scarcely less reprehensible than the forwarding statements such as seem to have been prepared and audited in the case we comment on. The machinery is defective. In every case there ought to be an authoritative corroboration of the monied condition of associations sanctioned by law for the encouragement of habits of frugality and thrift. For this purpose an adequate number of inspectors should be provided; their expenses could be easily defrayed from the State by some device of our ingenious Master of Finance. The loss of the money which such a fraud as that of "The Perseverance Life Assurance and Sick Fund Friendly Society" entails is the least part of the evil. The loss of confidence in institutions presumed to be under the scrutiny of the law, the disappointment and discouragement to those who had entered on habits of economy and exercised self-denial with a view to future provision, are of far greater consequence. Let us hope that we may be spared a repetition of such infamous schemes, the extent of the misery caused by which can be best estimated by medical practitioners, to whom in their hours of sorrow and distress the defrauded poor ever ultimately look for relief.

# Medical Annotations.

"Ne quid nimis."

## THE GENERAL MEDICAL COUNCIL.

ALREADY speculation is rife as to the formation and doings of the Medical Council for the ensuing session. What will be the composition? what will be the course which they will pursue? These are the questions which naturally present themselves to the profession. The first query will be answered in the course of the next week. We have reason to believe that, with scarcely a single exception, the present representatives

will be re-elected, but we believe it not unlikely that some change will be made in the Crown nominees. It is reasonable to suppose that one of the first propositions brought before them will be the admission of reporters to the meetings of the Council. The adoption of this measure is merely a question of time. The Council, if it is to exist as a representative body, cannot long resist the demand of the public that their proceedings should be open to the wholesome supervision of the profession through the press.

It is, however, highly desirable that one or two young and able men be added to the Council free from the trammels of overmastering tradition, and not the slaves of a corporation or school. Dr. Apjohn, Dr. Aquilla Smith, Dr. Alex. Wood, and Dr. Andrew Wood have been reappointed for the full term of five years. The University of London, at their meeting this week, have re-elected Dr. Storrar, no question arising, and apparently little interest having been felt in an appointment which yet was at first thought of great importance, and was the subject of hot debate. To some extent this apathy arises from the general insignificance of the proceedings of the Council, and is on that score justifiable so far. But we have yet to see what the future will bring forth. In re-electing Dr. Storrar the Senate have practically recognised the important principle of occasional renewal, when desirable, by making the term annual instead of quinquennial as before, the latter being the lifetime of the Council. As at present constituted, the Council represent chiefly the corporations and the schools; but these are not the whole profession.

If the Medical Council are to represent the opinions of their constituents, they will at once bring their influence to bear upon a modification of the Medical Act. In its present state nothing can be more unsatisfactory than that statute. It assumes to afford protection to the legitimate practitioner; but in this most essential point it is a dead letter. The 40th clause is inoperative. The Council are bound in honour, and in the interests of the profession, so to modify it that it will carry out the intentions of the Act. Registration should be made the test of qualification, either as to the assumption of titles or the right to practise. We have reason to believe that the Council are alive to the importance of this question; and that one of the first propositions which will be submitted to their consideration will be a revision of this clause. If the Council are firm they will be supported by the Home Secretary in their efforts to improve the Medical Act. Other subjects of grave import will demand their serious attention. They have great powers entrusted to them; those powers they must exercise in a liberal, but at the same time in a conservative, spirit.

We may mention in this place, that the printing of the Pharmacopœia is now on the eve of commencing. The whole of it, including the preface, is in type, and the final corrections have been given. It will be ready for issue in the course of a very few weeks.

## THE EPIDEMIOLOGICAL SOCIETY.

On the 2nd inst. the session of the Epidemiological Society was opened by an eloquent and suggestive address, by Dr. B. W. Richardson, "On the present Position and Prospects of Epidemiological Science." Having congratulated the Society on the continued success with which its great labours were conducted, and the increasing interest with which those labours are observed and studied by the intelligent members of the general public both at home and abroad, by Governments not less than by peoples, Dr. Richardson proceeded to sketch the realities of epidemiology which lie at our feet, and to point out the road which seemed most direct to the great end for which the Society was founded—the prevention, wholesale, of the pestilences of the earth. And first he noted, as a primary fact, that we have arrived at a definition almost absolute of each of the diseases of the epidemic class. We know, that is to say, all the forms which occupy our sphere of thought, as clearly as the astronomer knows the number of planets in his solar system. Such knowledge, he said, may be considered as exact; and the possession of it, the work of ages, commonplace as it has become, is by no means a contemptible progress. Another fundamental fact which has been determined is this: that epidemic disorders are essentially specific, as a general rule, in particular classes of animals. For example, scarlatina is peculiar to man, or at most to man and the pig; the small-pox of man is a disease itself specifically one, the small-pox of sheep is peculiar to the sheep, and so forth. This knowledge of distinction of disease according to animals is not merely an interesting part of our researches, but an important practical lesson. It will assist in a future day to an immense extent in clearing up questions of causation; in other words, it will enable the etiologist to explain the nature of certain poisons by a process of reasoning based on the peculiar organization of the animals in which the poisons are capable of producing special diseases. Other approved fundamental facts are, the influence of season on certain formidable epidemic diseases, the influence of elevation upon many of these disorders, and their geographical distribution. In these facts, Dr. Richardson stated, we have got another basic store of learning, the importance of which we cannot too dearly prize. Our knowledge here compares handsomely with that of the physical geographer, natural historian, and botanist. Nor need the epidemiologist shrink from the contest with these as to the point who is most exact and sure in his information; nay more, his acquirements in respect to these geographical matters admit of immediate and practical application.

Again, Dr. Richardson held that our ground is now tolerably safe in respect to the law that each disease which we may venture to call specific and spreading has for its cause one special poison. This theory, rightly understood, suffices, in his opinion, to explain all the observed phenomena of epidemics. While, however, standing firmly on this theory, it is requisite, for the benefit of the outer world, to give to it an interpretation which shall secure for it respect and acceptance. It is a theory which, partially understood, and so dogmatically asserted, is apt to lead the mind away from paying attention to important details, and to mischiefs that are not easily or momentarily remedied. Dr. Richardson gave an exposition of the true relations of this theory to sanitary science; and while cautioning sanitarians against embarrassing their labours with untenable hypotheses, ably defended sanitary measures. If it be asked, Why do sanitary measures effect so much real good?—one answer, he said, is clear, decisive, and simple. When the sanitarian improves the house he improves the inmates. If into a dirty, dark, ill-ventilated, badly-drained dwelling an epidemic poison shall enter and shall multiply there, there shall it remain long, because the conditions for its removal and destruction are most unfavourable. In the better-class house, the house well aired, well lighted, well traversed with water, the poison has many exits, and finds them; in the opposite condition it is neither burned nor buried, but rests for years ready to be distributed, and to afflict with its power anyone who is susceptible to its action and is offered up to it as a victim.

Turning to the prospects which lie before the epidemiologist, Dr. Richardson asked, "Which way shall we go with cheerfulness, hoping for success?" It appeared to him that the promise of successful travel was in three directions:—

(1) Towards a better knowledge of the sources of the poisons of the epidemic class.

(2) Towards a more correct appreciation of the changes produced in the body by these poisons, and as to the way in which they cause the destruction of life.

(3) Towards a more correct view in respect to the modes that should be adopted to destroy the effects of the poisons in the living organism; in other words, the means of cure.

The first proposition he illustrated by Dr. Salisbury's remarkable experiments on the production of a disease analogous to measles by the inoculation of the sporules of the fungus found in musty corn. The second proposition he illustrated by his own important experimental observations on the mode in which poisons of the epidemic class cause death—observations of the highest moment in respect to treatment. For instance, diphtheria, scarlet fever, croup, influenza, measles, and whooping-cough are accompanied by excessive formation and with separation of fibrin. It would follow, then, that those remedies would be as nearly as possible specific which check this formation and tend to hold fibrin in solution. Such remedies we possess in ammonia and the sulphites of soda and potassa; the use of the latter having been suggested first by Dr. Polli, of Milan. The third proposition was illustrated by several valuable suggestions for the use of iodine vapour as a disinfectant. The influence of this vapour in destroying organic particles in the air, and rendering the latter pure and inoffensive, is remarkable; and its adaptation for this purpose is simple in the extreme. For permanent use, the iodine is merely placed in a common chip box, or in a glass, covered with a layer of muslin. For special purposes, the iodine, placed in a saucer, is volatilized by the heat of a candle into the air of a sick room until the odour of iodine is just perceptible at all points.

A brief and stirring peroration ended Dr. Richardson's address, after which some historical notes were read, communicated to the Society by Dr. Archibald Smith, formerly of Lima, "On Epidemics in Peru in 1719–20 and 1759."

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## MEDICAL ASPECTS OF THE IMPENDING CRAWLEY COURT-MARTIAL.

THE turn which the Crawley Court-Martial, as to the death of Sergeant-Major Lilley, is likely to take, is a matter of medical interest. It is stated that it will be shown that the accommodation of Sergeant-Major Lilley was neither so bad as has been represented, nor so bad that the surgeon had thought it advisable to represent to his Colonel that either the sergeant-major or his wife was suffering in health from it. The defence will, it is asserted, rest in a great measure upon this fact. It will prove, we believe, that the surgeon did not make that representation; for commanding officers do not like to have such things pointed out to them, and generally make matters very uncomfortable for surgeons who persist in doing it. In the interests of justice we shall turn our particular attention to the Crawley Court-Martial, and meantime we have looked up the antecedents of the surgeon. Gavin Ainslie Turnbull, the surgeon of the 6th Dragoon Guards, entered the service in August, 1850, as assistant-surgeon in the 66th Regiment. About May, 1855, he was appointed assistant-surgeon in the 12th Lancers in the Crimea, and served with them there till the end of the war. In December, 1855, Mr. Turnbull was fortunate enough to be appointed surgeon to the 12th Lancers, thus obtaining his promotion after the remarkably brief period of five years and four months' service as an assistant-surgeon. This rapid advancement, as we understand from well-informed and perfectly independent sources, was due to two circumstances: the first being the great increase in the number of officers of the Medical Department during the Crimean war; the second, the especially favourable notice which had been made of Mr. Turnbull's professional services. Surgeon Turnbull exchanged from the 12th Lancers to the 6th Dragoons a short time before the latter regiment was ordered to India.

As to the course pursued by Mr. Turnbull in not more actively protesting against the close and continued imprisonment of Sergeant-Major Lilley, we reserve comment until the inquiry shall have more fully ventilated both sides of the case. But it appears to have escaped attention that Mr. Turnbull did verbally protest against that close confinement—a protest which was received very ungraciously by Colonel Crawley, who had ordered the arrest and detention of the prisoner under conditions altogether exceptional, but who conceded on that remonstrance the privilege to the prisoner of sitting outside under the verandah, but with the peremptory order that he should never be lost sight of by the sentinel placed over him. This was not very encouraging, and, taken together with the peculiar military circumstances of the arrest and the unpleasant hints given at the time as to interference with the discipline of the regiment, would keep back any gushing suggestion on the subject. We apprehend, however, that the black-hole parallel which has been drawn will not be found to hold. The quarters were habitable, and the sergeant did not employ his option of asking to be attended in hospital, not wishing to leave his dying wife: indeed, the cruelty was not so much in the quarters assigned as in the conduct pursued towards the unfortunate man when confined in them. The fact was that the health of Serg.-Major Lilley did not present indications of breaking down from the mere confinement, such as would have justified his surgical attendants, Mr. Turnbull and Mr. Barnett, in pressing any urgent remonstrance on that ground; and they had no reason to expect a fatal termination to the case until just before it occurred. Sergeant-Major Lilley died of a broken heart: his close arrest for so prolonged a time, under conditions of great hardship; the close and incessant surveillance of the sentinel over himself and his dying wife, in a manner revolting to decency, preyed upon his mind. But these were circumstances which it was difficult, if not impossible, for a medical officer to represent to an enraged colonel, deeply angered against the prisoner, and acting upon his own responsibility. The attempt, however, will no doubt be made, from what is stated in well-informed circles, to shift the blame in some measure upon the surgeon for not protesting more vigorously.

The order by which medical officers are required to call the attention of the commanding officer to any circumstances which may be injuring the health of persons under the command of that officer, is in art. i., chap. 20, p. 77, of the Army Medical Regulations. It runs thus:—

"The Medical Department of the Army and its officers are charged, not only with the medical care of the sick, but with the duty of recommending to commanding officers, verbally or in writing, whatever precautionary measures may in the opinion of the department and its officers conduce to the preservation of the troops, and to the mitigation or prevention of disease in the army, whether at home or abroad. But in the event of any verbal representation not being complied with, the medical officer shall make a representation in writing on the subject to his commanding officer."

It is very unfortunate that the regulations leave it optional to speak or to write. If the medical officer now write on such a subject, the commanding officer will generally send for him and say, "Let us have no writing; if you have anything to point out, come and tell me what it is." And when thus talked about, there is no record. And, moreover, as the comfort and peace of the regimental medical officer are wholly in the hands of the commanding officer, and as the professional subjects which the surgeon would have to speak about would not generally be considered pleasant subjects by the commanding officer, it may readily be understood how frequently such things go on without anything being said about them, and how rarely it will happen that they are represented in writing. No doubt duty should always be done, and no excuse can be admitted for not doing it; but the surgeon is placed in a most trying position when he does it. If to write were the order, there would be no escape, and then the responsibility would rest with the commanding officer for complying with the medical recommendation or not, as he might think proper.

It is worthy of note that pains seem to have been taken in the regulations to prevent such an option being left to the principal medical officer or sanitary officer with an army; and what is necessary for an army one might think would be necessary for a battalion. It is laid down in the Medical

Regulations (art. ix., ch. 21) that "the principal medical officer or sanitary officer, as the case may be, of any army in the field, shall, on being consulted by the commander of the forces, give advice in writing on all subjects bearing on the health and physical efficiency of the troops. Even where such advice is not requested, the principal medical officer *shall nevertheless send in writing* to the commander-in-chief of the forces the fullest information on these subjects, with such recommendations as appear necessary for protecting the health of the troops."

This discrepancy of practice we recommend to the attention of the authorities as a matter needing alteration. It obviously has a bearing upon the present case. The attempt to exculpate Colonel Crawley may probably not succeed on other grounds; but we do not think it at all unlikely that he will be acquitted of all crime in reference to the deaths of Sergeant-Major Lilley and his wife, from not being aware of their position involving any danger to their lives.

## DEATHS FROM CHLOROFORM.

A VERY practical commentary on our remarks last week, touching the proceedings of the Chloroform Committee of the Medical and Chirurgical Society, has been afforded by the occurrence of two deaths from chloroform in private practice, since the two which recently happened at the London and St. George's Hospitals. These additional deaths have taken place under somewhat peculiar circumstances, calling for special attention. The first of them occurred at Salisbury on Monday week, in the person of a young woman named Emily Luther, whilst under the influence of chloroform, which had been administered by Dr. H. P. Blackmore for the performance of an operation for fistula.

At the inquest, Dr. Blackmore said—I saw the deceased for the first time on Sunday night; she was suffering from fistula. On Monday I called, and told Mrs. Luther that although I did not think it necessary to bring a second surgeon, I would do so if she wished it. She left the decision to myself, and I decided on not bringing anyone with me. The patient was lying in bed, and appeared pretty well. I ordered castor oil and a little brandy-and-water. Before I commenced the operation I gave her about a tablespoonful of raw brandy. I then poured a small quantity of chloroform on a handkerchief, which I placed on her face; she inhaled it freely and was soon under its influence, but struggled slightly while she was insensible. The whole quantity of chloroform taken was four drachms and a half. She was insensible for about six or seven minutes. The chloroform was quite pure, and of the usual specific gravity. As she became insensible I commenced the operation, which lasted two or three minutes. The handkerchief was removed before the operation. At the termination of the operation I found she had not revived; her respiration became gradually slower, and ceased in about three minutes. I applied cold water to the face, administered sal volatile, used the galvanic apparatus, and had recourse to Dr. Marshall Hall's plan for procuring artificial respiration, without effect. I am constantly in the habit of using chloroform, and occasionally without an assistant, according to the nature of the operation. Unless there are particular reasons, it is not necessary to have the assistance of a second surgeon. From her previous history there were no symptoms that led me to infer that there was the slightest danger. Her heart did not appear to be diseased. She suffered occasionally from indigestion.

Mr. J. M. Cardell, F.R.C.S., said that he had made a post-mortem examination of the body, which appeared to be that of a large, well-made young woman. There were no external indications of importance, except that the stiffness after death was less than usual. On opening the body he was struck with the large quantity of fat in so young a woman: it was an inch thick on the chest. The liver was greatly enlarged, and, pressing upwards, it diminished the breathing space of the lungs; it must have also much impeded the action of the heart. The heart was of a light-yellowish colour, and contained, mixed up with its healthy tissue, a large quantity of fatty matter. The lungs were extremely small, and gorged with blood; and sections of them showed the black patches which indicate death from chloroform. The heart was flabby and deformed; the walls of the left ventricle were abnormally thick, and those of the right very thin. The stomach was empty. He attributed the death to chloroform. Four drachms and a half was not a large quantity. He would administer chloroform for a similar operation, if desired by the patient. It was quite impossible to determine that it was an improper case for chloroform. The average number of deaths under its use was 1 in 16,000. He did not think that an opinion could have been formed that chloroform was inadmissible in this case, though the post-mortem examination showed that she was a bad subject, and not so healthy as she appeared to be.

The jury, after a brief consideration, returned a verdict that the deceased died from the effect of chloroform administered by Dr. Blackmore. They were of opinion that, although no blame could be attached to him for want of skill, yet for the future it would be advisable for a second medical practitioner to be present during the administration.

The second case occurred in the practice of Mr. John Gay, surgeon, of Finsbury-place, Finsbury, also in the person of a young woman, aged sixteen.

At the inquest, Mr. Gay said—I was consulted about six weeks ago for a hare-lip and cleft palate and enlargement of the tonsils. I removed the tonsils six weeks ago, not under chloroform. Then the palate was to be repaired. After the operation on the tonsils the deceased became generally well. On Wednesday I went to her house to operate on the palate. Mr. Worley helped me. It was not under chloroform. After commencing the operation her courage failed her, and she would not allow me to proceed. At that portion of the treatment it was agreed that the operation should be deferred. On Thursday she came to my house to have her lip operated on, and Mr. Worley came to assist me. Mr. Worley is a surgeon of Hoxton, and a very skilful man. He has administered chloroform under my superintendence. The deceased appeared in good health and spirits, and sat down in a chair. Mr. Worley assisted me in the operation on a child, and it was all right. We used an inhaler for the deceased, but it had not the desired effect, and a piece of lint saturated with chloroform was applied to her nostrils. In three or four minutes the usual spasms which precede the loss of sensibility were apparent, and I was waiting for complete insensibility, when I discovered that the pupil of the eye dilated rapidly; she fell back, and her face became pale and her lips bluish. I put my hand to her pulse, and it was gone then—there was no life. I immediately tried every means with artificial respiration for half an hour without success. The mother, my servant, Mr. Worley, and myself were in the room. Mr. Worley did not attend to her pulse continuously. It was not necessary in my judgment. Whilst he was administering the chloroform, I was standing close by watching the effect of the chloroform, and making any suggestion that might arise. I had felt the pulse more than once. I do not think it necessary for the same person to notice the pulse who administers the chloroform. It is constantly the practice to administer chloroform without noticing the pulse. I was not holding her pulse at the time when she went off. I think an occasional feeling of the pulse quite sufficient. I had listened to her heart before. I know it was not diseased. That is not so good a criterion as other means—such as watching the pupil of the eye and feeling the temporal artery.

Mr. W. C. Worley, of Hoxton, said—I was present on the day in question, and administered the chloroform on lint, the inhaler having produced no effect. I held the lint, and Mr. Gay was standing by. I felt the pulse occasionally, but not continuously. I was on the left side of the deceased, and felt her left pulse. She sat in an easy chair. Mr. Gay was in charge of the patient, superintending the administration. I have been present at many administrations both at hospitals and in private practice—at Charing-cross and Westminster Hospitals. It is not, in my judgment, necessary for the person administering the chloroform to have charge of the pulse also, if others are attending the patient. I saw Mr. Gay, a few moments before the struggle began, having hold of the pulse, but he had not continuous hold of it. I do not think it is necessary to have continuous hold of the pulse, if you are looking at the patient, watching the eyes, and feeling the temporal artery, which is as good as feeling the pulse.

The learned Coroner, in summing-up the evidence, dwelt in strong terms upon the omission of the medical men continuously to watch the pulse; for, he said, had the pulse been continuously attended to, it was probable that the life of the deceased might have been saved. From his own personal experience he could say that it was usual for the administrator to hold the pulse. He could not recommend the jury to return a verdict

of manslaughter, for it was evident that it was an error in judgment.

After a long consultation, the jury returned a verdict "That Ellen Smith had died from the effects of chloroform administered previous to an operation, and that there was no blame attached to the medical men."

Now these cases are important occurring just at this moment, because they suggest certain questions as to which it will be well for the Committee to express as decided an opinion as the elements of judgment at their command will permit. In the first place, we may say that we entirely concur in the verdicts in both cases; and that, as the surgeons were conscientiously acting upon their skilled conclusions on an uncertain question, and were taking all those precautions which they thought necessary, they are free from liability to censure. But did they take all the precautions which ought to be thought necessary? We think not. We consider that in *all* cases the chloroform ought to be administered by a second person, whose sole business it is to attend to that duty. We deem it to be a most important function of that person to carefully watch the face of the patient, note his respiration, and above all attend carefully to the state of the pulse. The results of investigation certainly tend more and more to confirm the opinion that these deaths by chloroform are heart-deaths, and the observation of the pulse is therefore a matter of the last importance. Finally, we believe that the chloroform ought to be administered as far as possible in a definite relation of per-centage to the atmospheric air supplied at the same time; and no apparatus yet devised seems to fulfil the indication so well as that of Mr. Clover, which is in use at the University College Hospital. These propositions will, we feel satisfied, meet with the assent of the great majority of surgeons and of our administrators of chloroform at the principal hospitals. We trust that the Chloroform Committee will submit them to a rigid analysis, and afford us at least definite rules for guidance. The present variation of practice is attended with disastrous consequences; and it is worthy of note that a great number of deaths have happened during the administration of chloroform privately, and for the most trifling operations.

## ONE OF THE LABOURS OF HERCULES.

MEDICINE has before her a task of which ancient fable hinted at the magnitude when the strength of Hercules was applied to do scavenger's work. How to be clean is really the great problem of State medicine; for, despite the support which the "dirty party" propose to draw from some recent authoritative utterances, it cannot be admitted that the question is capable of being reopened in any broad or general sense, and the effects of fresh air, pure water, and an uncontaminated ground, have been shown by results so great, so numerous, and so convincing, that the suggestion of doubts in particular instances cannot affect the necessity for sternly proceeding with the work in hand.

Amongst those who have hitherto suffered greatly from the unhealthy conditions in which their trade is carried on are, as is well known, the journeymen bakers. Medical investigation confirmed the worst statements on behalf of the bakers; and a recent Act provides for the regulation of bakehouses. Dr. Letheby had a circumstantial inspection made of every bakehouse in the City limits. Fifty-one, or about one-third, of the whole number were in a filthy condition; and, in four cases, the ventilation was imperfect. Nearly all the dirty bakehouses were in the eastern and north-eastern districts. In other respects the results of the inspection were generally satisfactory; and orders have been given for the cleansing of certain specified bakehouses, and for enforcing the provisions with regard to ventilation.

For the information of our readers, we may say that the following are the main provisions of the Act:—

"That no person under the age of eighteen years shall be employed in any bakehouse between the hours of nine at night and five in the morning; that every bakehouse shall be kept in a cleanly state, shall be provided with proper means for effectual ventilation, and shall be free from effluvia arising from any drain or other nuisance. Lastly, it provides that no place on the same level as the bakehouse shall be used as a sleeping-place unless it is entirely separated from the bakehouse by a proper partition, and shall have an external glazed window of at least nine superficial feet in area, half of which shall be made to open for ventilation."

The medical officers of health are also pursuing the task of removing the cowhouses; and a decision has been given by the local magistrates, decreeing the removal of a cowhouse in St. Pancras, mainly on the evidence of Dr. Lankester, to the effect that "cowhouses were prejudicial to the public health in confined neighbourhoods, especially where grains and manure were not removed repeatedly;" and that the insufficient and impure atmosphere of cowhouses was very prejudicial to the health of the cows and the quality of the milk.

## THE ARMY MEDICAL SERVICE.

THE following extract from a letter of a very well known Indian medical officer of high position in the service, to a friend in this country, was received by the last mail. We recommend it to the careful consideration of the authorities, who are at present, we know, occupied with the question, "How are we to restore the confidence of the rising generation of medical men, and attract them into the public service?" The letter from which the extract is taken was not written for publication; it was not intended as a contribution to any "agitation:" it is what it professes to be—the opinion of an experienced officer on what is passing before his eyes.

"The more I see of the British army, the more I am satisfied that officers of high military rank do not desire to see medical men of good social position, high attainments, and independence of character in the service. The amount of discontent and unhappiness amongst the medical officers of the home service out here is very remarkable. There can be no doubt that they occupy a social position in their own service far inferior to what was willingly and by universal consent accorded to us in the old Indian service. Under this they fret, and appear always to suffer from what may be called this 'social blister.' As for us [the Indian medical service], under the new *régime* we are fast being dragged down to a lower level by a force constantly in operation that we cannot resist. No wonder candidates are scarce; no wonder that educated men shrink sensitively from entering a service where such treatment awaits them. For myself, I thank God the hour of my retirement is at hand."

# Correspondence.

"Audi alteram partem."

## THE LAHORE MEDICAL COLLEGE.

*To the Editor of* THE LANCET.

SIR,—A notice of the Punjab Medical College having appeared in your issue of July 25th (p. 114), in which it is erroneously stated that Government have resolved to abolish the College, which, after a trial of three years, has been found unsuccessful, I hasten to lay before your readers the true state of the case.

The information, which has been communicated to you is evidently based upon a minute of the Supreme Government, dated April 7th, 1863, the object of which was, not to decree the abolition of the College, but simply to state that its success had not been such as to justify the expense of an additional professor, for whom application had been made.

Furthermore, your notice must lead the public to believe:

1st. That the Lahore College educates only sixty students at a time, at 30,360 rupees per annum, while the Agra Medical School educates one hundred and forty at 9200 per annum.

2nd. That the students educated at Lahore are all of the same class as those educated at Agra.

3rd. As a corollary to the above, that the Lahore College, educating less than half the number taught at the Agra School, at more than three times the cost, is necessarily more than six times as expensive.

Now, with reference to the first point, your numbers, though not strictly accurate as regards the Lahore College, are not far wrong, the actual number of students, at the time your paper was published (July 25th), having been sixty-nine.

A few observations on the second and third points, however, will fully expose the misunderstanding to which the notice alluded to is calculated to give rise.

Second and third points. The Lahore College educates a class of men in the English language, whose acquirements, it is hoped, will equal those of men educated in London, Edinburgh, or Dublin. Such a class has for many years been maintained at the Medical College in Calcutta, with complete success. The men so educated are called *sub-assistant surgeons*, and have proved themselves, on many most trying occasions, to be fully equal to the responsibilities of practice, even when far removed from European advice or assistance. The Lahore institution is therefore designated the Medical *College*, as it corresponds, in all essential particulars, with the Medical College in Calcutta. For such an institution, European professors, and all the elaborate apparatus required at Medical Colleges in England, are equally requisite at Lahore.

The Agra institution, on the other hand, is always called the Agra Medical *School*, because it trains only *native doctors*. Now, native doctors are a wholly subordinate class, merely intended to act as hospital assistants, and not to undertake the responsibilities of independent practice. These men are not obliged to understand English, and are taught only the *rudiments* of medical science, in the Hindustani language, by native teachers. You will readily understand how a great number of such students may be educated at a trifling cost; while it will be no matter of surprise that the expense of a college at Lahore, professing to give the same education as is given at the University and King's College in London, amounts to 30,360 rupees, or £3036 per annum.

Indeed, when it is remembered that, in the Punjab, no fees are received from the students, but, on the contrary, considerable sums expended on them in the form of scholarships and stipends, it will probably be a source of wonder to your English readers that a good medical education can be afforded in this distant province at so small a cost.

I herewith enclose a prospectus of the Lahore College, which explains more fully the difference between the class of sub-assistant surgeons and that of native doctors.

I remain, Sir, your obedient servant,

J. B. SCRIVEN, M.R.C.S.,
Principal of Lahore Medical College.

Lahore, Sept. 1863.

*** Our report was extracted from an Indian newspaper.—ED. L.

## CALABAR BEAN.

*To the Editor of* THE LANCET.

SIR,—In Mr. Nunneley's interesting communication on the Calabar bean in your last number, I find an observation at variance with those of Dr. Christison and myself, to which I think it well to call attention. Mr. Nunneley has not succeeded in depriving the bean of its active properties by means of alcohol, for he says that "after spirit has been made to extract all it is capable of doing, the mass left retains sufficient power to be actively poisonous." It was found, however, by Dr. Christison that the active properties of the bean might be concentrated in an alcoholic extract, a fact which my own experiments confirm. Having reduced the bean to fine powder, I exhausted it by repeated boilings in alcohol, specific gravity 838: the resulting amylaceous residue, having been mixed with lard and cheese, was given to rats, which were fed upon it for several days without sustaining apparent injury.

I am, Sir, your obedient servant,

DANIEL HANBURY.

Plough-court, Lombard-street, Nov. 1863.

## ARMY MEDICAL OFFICERS.

*To the Editor of* THE LANCET.

SIR,—"A Deputy Inspector-General" alleges that advancement to the grade of surgeon-major is certain after twenty years' service. This is a mistake; the designation and advantages of surgeon-major are only given after twenty years' full-pay service in cases where the medical officer has previously been promoted to the rank of surgeon, so that an assistant-surgeon of twenty years does not become surgeon major, but must wait till he is promoted to surgeon, which may never happen. Indeed, the much-vaunted Warrant of October, 1858, clearly contemplates medical officers never rising beyond the lowest step in the service, inasmuch as Clause 11 provides that all assistant-surgeons, on attaining the age of fifty-five, shall be placed on the retired list. Now, Sir, there are 630 assistant-surgeons, and the mean annual rate of promotion during the last seven years has been only sixteen, so that those now entering the service cannot expect promotion in less than thirty-five to forty years; and, taking the youngest age of entry, twenty-one years, they will be beyond the limit before it comes to their turn. It is not pleasant to spend one's whole life in a subordinate capacity; and the following statement of income, actual and prospective, will not render the view more lively:—For the first five years, £18 10*s.* a year; the next five years, £209 17*s.* 6*d.*; and during the rest of full-pay service, £237 5*s.*; and at the age of fifty-five, forced retirement on £182 10*s.* a year—a magnificent provision for old age, and truly munificent return for broken health and mental disappointment! Many may say the above is a highly-coloured statement. Believe me, it is true to nature, and the shading is not overdone.

I remain, Sir, your obedient servant,

October, 1863. M. D.

## SCOTCH, IRISH, AND PROVINCIAL CORRESPONDENCE.

### EDINBURGH.

(FROM OUR SPECIAL CORRESPONDENT.)

SINCE I forwarded my last letter the case against the apothecary of the Dispensary here has been concluded, and contrary to the view I took of it. After hearing the evidence of the physician who gave the prescription, and also that of two other medical men who had attended the pursuer, the Sheriff found the defender liable in damages for the injury done to the female, but in consideration of the circumstances of the case he modified the amount to £3 3*s.* This decision will, no doubt, cause some uneasiness to the medical men who attend gratuitously to the Dispensaries in this city. It is necessary for each student who presents himself for examination before our boards to present a certificate of having had six months' dispensary practice. These students are the pupils of the dispensary medical officers, and according to the decision now given these gentlemen will be held responsible for any error in prescribing which may be made by a student whilst a pupil. Supposing a student prescribes too large a dose of hydrocyanic acid, from the effects of which a patient suffers, the student would be held scathless, whilst the unfortunate medical officer, whose pupil he happened to be, would be held liable for the injury done to a person he never saw. This certainly may be law, but it does not appear to be justice. As each student before he gets his certificate must show that he has attended a certain number of patients at their own homes, it becomes a very serious matter indeed if the medical officer is to be responsible for the treatment he may adopt and the doses he may prescribe. It is surprising that the case has been allowed to pass without comment and without any objections being raised to the decision by those interested. One good result may, it is to be hoped, attend this decision, which holds the apothecary of a public institution liable in damages for the errors of his pupils. It is that it may have a beneficial effect on the dispensers of prescriptions and make them more careful, as there can be little doubt it too often occurs that carelessness exists amongst the Galenic tyros, who learn "to dispense neatly" at those institutions where they are not paid for their services, but pay for being taught.

The Colleges of Physicians and Surgeons commenced the winter session on the 2nd inst., when Dr. Warburton Begbie delivered an eloquent, learned, and practical inaugural address, which I understand will be published. The lecture-room was crowded.

Dr. Craigie, President of the Royal College of Physicians, and Dr. Newbigging, President of the Royal College of Sur-

geons, have lately had the honour of dining with his Royal Highness Prince Alfred. Both the Colleges had entertained his Royal Highness during the meetings of the Social Science Association.

On the 21st of October the office-bearers of the Royal College of Surgeons were elected. The Fellows have conferred the honour on Mr. Benjamin Bell of electing him as their President. Mr. Bell became a Fellow of the College in 1835; he is also a Member of the Royal College of Surgeons of England, and is a highly respected member of the profession. Dr. John Gairdner, author of the "Historical Sketch of the Royal College of Surgeons, Edinburgh," is the Treasurer, Dr. A. Inglis is appointed Librarian, and Dr. Simson, Secretary.

The College at a previous meeting had re-elected Dr. Andrew Wood, Fellow and formerly President of the College, their representative to the General Council of Medical Education and Registration; and the College of Physicians at their quarterly meeting yesterday re-elected Dr. Alex. Wood, Fellow and Vice-President, to represent them at the same Council.

The winter session at the University was opened on the 2nd inst., with an inaugural address by the Principal, Sir David Brewster. The learned Principal was accompanied by their Royal Highnesses Prince Alfred and Prince William of Hesse, the members of the Senatus Academicus and the University Court. The University is to be honoured by having the names of the Princes amongst its students. The address was not generally interesting except to those connected with the University, and consisted chiefly of a notice of those persons who had benefited the University by founding bursaries or making presentations to it: the chief benefactor was General John Reid, who bequeathed £68,000 "for establishing and endowing a professorship of music in the College and University of Edinburgh;" but it singularly happens that this bequest, intended to promote *harmony*, is a yearly source of *discord*. Amongst other matters, the Principal stated that a College Hall had been established, and that it would be opened for the reception of fifty students at the commencement of next session.

At the General Council of the University, which held its statutory meeting on October 31st, the first business was the election of an assessor to the University Court. The only name proposed was that of Mr. John Muir, Doctor of Civil Law in the University of Oxford, and Doctor of Law in this. The election was unanimous. Dr. Muir is one of the most recent benefactors of the University, and lately founded a chair for the Sanscrit language and literature, and is well entitled to the honour, not only on account of his liberality, but also from his character and talents. The other business had no bearing on the profession.

Edinburgh, November 4th, 1863.

## DUBLIN.

(FROM OUR OWN CORRESPONDENT.)

THE winter campaign was opened here yesterday morning by an introductory address delivered in the splendid theatre of the time-honoured Meath Hospital, by its amiable and accomplished senior surgeon, Mr. Smyly, Vice-President of the College of Surgeons. On my arrival I found a large number of the leading practitioners in this city assembled in honour of the learned lecturer, as also a crowd of students, amongst whom might be seen a fair sprinkling of first-year's men. The medical and surgical staff of the hospital of course were present in full force. On looking over these, a curious thought flashed across my mind—that were an old pupil, say of some forty years' standing, to revisit the hospital, he might well fancy, from their names, that his old instructors were still *in esse;* for now, as then, amongst the staff are found the names of Stokes (the even more distinguished son of an illustrious father, and his successor in the hospital), Porter, Collis, Smyly (P. C.), and Macnamara; a fact the more curious when we reflect that the staff is limited in number to eight—two physicians (Drs. Stokes and Hudson), and six surgeons.

Of course I cannot venture to give more than a very brief outline of an address as able as it was practical, and which well merits reproduction in a more permanent form. The learned lecturer commenced by giving the junior members of his auditory wholesome advice on the importance to their future welfare of a sound preliminary education, some portion of it to be collegiate, if practicable. He then touched upon the value to the future practitioners of polished manners, and recommended them to become during their studentship domesticated in the family of a medical man. He next impressed on their attention the importance of educating their senses to observe, and at the same time to seize every opportunity of cultivating the *tactus eruditus*, which could only be done by a diligent attention to their duties as dressers. This portion of his subject he illustrated with many happy examples, some extracted from the works of Cooper, Collis, &c., others original. Talking of the importance of a familiarity with the minor operations of surgery, he mentioned that a lady suffering severely from toothache, in a remote part of the country, drove up to the dispensary to seek relief at the hands of the surgeon by having the offending member extracted. The surgeon was absent, but his servant told the lady that that circumstance made no difference, for, if even at home, he would not extract it, as for the twenty years that he had been with him, he never saw his master extract a tooth or use a knife. No, he continued, he will ask you "if you had a pain in your eye, would you have it out; or in your head, would you have it cut off?" The lady, not able to credit this statement, and still suffering from the pain, returned next day, but only to find that the servant's statement was verbatim true. The interrogatives described were actually put, with the solemn addition, "Madam, were I to extract your tooth it would be tantamount to confessing that I could not cure a toothache."

Mr. Smyly then rapidly reviewed all the means which modern science has placed at the surgeon's disposal for the diagnosis of diseases, and concluded a most interesting lecture by dwelling at length on the moral and religious attributes which should characterize the medical man, in the best and truest sense of the word; winding up with a passage from Sir Benjamin Brodie's address to the students of St. George's Hospital as reported by Mr. H. Lee.

I next turned my steps to the Ledwich School of Medicine, Peter-street, the most important of our unchartered schools, which long has maintained a high reputation for the superior style of anatomical education imparted to its *alumni*, and which commands in consequence one of the largest classes in this city. This school, formerly known as "the Original," was founded by the late Dr. Kirby, and speedily obtained celebrity from the rapidity with which its pupils were prepared for commissions in the public services; indeed, so much so that a caricature of that day may still be met with, representing the learned professor standing at the door of a mill, at which he receives a young man, evidently fresh from the country, who is represented issuing from another door in the full military uniform of an assistant-surgeon. Its present name is derived from its late Professor of Anatomy and Physiology, who was snatched away at an early age from science and his sorrowing friends. Here the task of opening the session was entrusted to the able hands of Mr. Wharton, the Lecturer on Surgery in the School, and also one of the surgeons to the Meath Hospital, and whose address was evidently directed to the younger portion of his auditors.

The winter session at the School of the College of Surgeons was opened this year, as it has been any number of years past that I can remember, by the veteran and distinguished Professor of Anatomy and Physiology, Dr. Jacob, the far-famed oculist of Dublin. Before the commencement of the lecture I had an opportunity afforded me of taking a survey of the really splendid theatre and anatomical rooms of this institution, and was greatly pleased with their general appearance, their cleanliness, and their ventilation. The entire suite of the School buildings have been recently submitted to a thorough renovation, and now are models for what such buildings should be. A special feature in this School is the antiseptic process to which the subjects are submitted, in virtue of which they remain months without undergoing putrefaction—a process devised by Dr. John Morgan, the Professor of Practical Anatomy, the principles of which he proposes to extend to the curing of bacon, and for which he has already obtained a patent.

Professor Jacob commenced by paying a touching and well-earned tribute to the virtues and attainments of his late colleague, the lamented Dr. Power, Professor of Surgery, and author of a standard school work on the Arteries. He then passed such of the proceedings of the General Medical Council as related to medical education under review, pointing out that many of these suggestions emanated years past from the Council of the Irish College of Surgeons. He then laid before the class the varied and extensive character of their curriculum, congratulated them on the success of their fellow-students at the recent army examination, and wound up a most interesting discourse by impressing on the student the value of written and demonstrative examinations.

Abandoning the subject of introductory lectures, at all events for the nonce, and turning to other topics of medical interest, I have to announce to your readers the appointment by the Poor-law Commissioners of Dr. Croker King to the post of Inspector of Medical Charities, vacated by the resignation of Dr. Geary. There were several candidates for the office, but finally the choice lay between Drs. King and Burke, of this city, and Gurtlan, of Dundalk. Queen's University influence, however, is stated eventually to have decided the question; Sir Robert Peel, *ex officio*, being one of the Poor-law Commissioners, and his predilections in favour of these Colleges being too notorious to require my dwelling on them here. Dr. King was Professor of Anatomy in the Galway College, the salary of which is £250 per annum, with fees from pupils; also surgeon to the Union Hospital (salary £100 per annum), inspector of lunatics under the Court of Chancery, surgeon to the constabulary, Admiralty surgeon Port of Galway, &c., all of which situations are now vacant, and the first of which, the Professorship of Anatomy and Physiology in the Queen's College, Galway, must be immediately filled up, as the session is now in full swing. The appointment is in the gift of the Lord Lieutenant, or in his absence (as is now the case) in that of the Lords Justices, to whom all applications must be submitted on or before the 14th inst., under cover to the under-secretary, Dublin Castle. It is to be hoped that, after the many years that these Colleges have now existed, some one of their *alumni* will be considered competent to fill the vacant chair; indeed, were the appointment left in my hands I could nominate more than one such who would do credit to the appointment.

The situation that Dr. King has accepted has a salary attached to it of £500 per annum, with yearly increments of £25 until it reaches £600 per annum, with an allowance in addition for hotel expenses of £150 per annum, and all locomotive expenses. In my opinion the services of such a man have been secured to the country at a price approaching that of a very great bargain indeed, an opinion which the profession here seem to be unanimous in entertaining.

A very influential deputation from the Irish Medical Association, comprising the Chairman of Council, Dr. Mackesy of Waterford, the Secretary, Dr. Quinan (Dublin), Dr. Armstrong (Cork), Dr. Bradshaw (Tipperary), Professor Benson, Professor Macnamara, Messrs. Tuffnell, Healy, Fausset, Johns, Darby, &c., waited upon Sir Robert Peel on Friday last, by appointment, for the purpose of bringing under his notice the defects of the existing Medical Charities Acts (Ireland), and, by enlisting his sympathies, in the hope of inducing him to introduce this ensuing session an amended Bill. Nothing could be more courteous than the bearing of the honourable member for Tamworth; he patiently listened to each speaker, and surprised all present with his intimate acquaintance with every phase of the question. Dr. Mackesy was the principal spokesman, and acquitted himself so admirably as materially to enhance the claims he has already earned for himself on the good opinion and gratitude of his professional brethren—claims to which, by the way, they seem quite alive, and of which more anon. The principal subjects brought under Sir Robert Peel's notice were: the difficulty that at present exists with respect to the cancelling of a ticket for medical relief under the Medical Charities Act, when issued to an improper subject for such relief; the propriety of making solvent parties pay for such relief when tained under the plea of poverty; the necessity that exists for making the minimum salary of each medical officer employed under the Act £100 per annum; the necessity for some regulation that would ensure permanency of tenure of office when the boundaries of districts are changed; the expediency and justice of a superannuation allowance; and, finally, the unconstitutional manner in which investigations into charges against medical officers are at present conducted. What the deputation said to Sir Robert Peel, and what Sir Robert said to them, are too important subjects, however, to be crammed into the fag end of a letter, so must lie over until next week.

Ere this, your readers, doubtless, have had submitted for their perusal the November number of our *Quarterly Journal of Medical Science*. It would ill become your correspondent to assume to himself the duties of your reviewer, but he may be permitted to direct their attention to the ingenious suggestion that appears in Mr. Porter's valuable contribution to operative surgery, for controlling what is occasionally a troublesome complication in amputations of the thigh—namely, haemorrhage from the vein. Having seen it employed in more than one case with marked success, I can speak of it in terms of high approbation.

Dublin, November 3rd, 1863.

## LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

One of the subjects which have attracted as much the attention of the medical world as of the public in Liverpool is the petroleum nuisance. The word nuisance is used intentionally; for though opinion is divided as to its effects on health, yet one thing is certain, that in those neighbourhoods where it is stored, and no precautions are taken to prevent leakage, and also in those where the refining of it is carried on, the odour is so positively offensive as to class it amongst the public nuisances. Now, whether an exhalation or gas can intermix so largely with atmospheric air as to make it extremely disagreeable to the smell, and yet not influence the effect of that air on persons inhaling it night and day, seems extremely doubtful. If the gases evolved from decaying animal and vegetable matter affect the health of those exposed to their influence, then in the same manner must the strong odour arising from a liquid, which, judging from an analysis of it, does also evolve sulphur and phosphorus, in combination with hydrogen. Assuming, till the contrary is proved, that there is no gas or combination of gases that can be substituted for atmospheric air, in which animals could live and thrive for any length of time, then the presence of any gas or exhalation in the air displacing so much atmospheric air, must, according to the quantity and length of time, exert an influence on the life inhaling it. One more argument may be adduced. One reason why the sense of smell is provided, and why some odours are agreeable and others offensive to the olfactory nerves, is, doubtless, because those that are offensive would prove injurious to the system; and thus animal life is led to avoid them by the disagreeable sensation produced. Thus much on the possible effect of petroleum on the health if no precautions were taken to prevent the smell from poisoning the atmosphere. The Health Committee of Liverpool have taken up the question, and have drawn up a system of rules and regulations respecting it, that, if carried out, will tend to do away with the evil to a great extent. Petroleum has become a very important article of commerce, 80,000 barrels having been imported into Liverpool alone during the last nine months. Of this only 8578 barrels were Canadian, and it is this that emits the disgusting smell. It contains sulphur and phosphorus, which the Pennsylvanian petroleum does not. The latter constitutes the bulk of that imported, and has very little smell, and that not of a particularly disagreeable nature.

To turn to another subject more strictly medical. In THE LANCET of the 29th of August, a case of poisoning that occurred in Liverpool was mentioned, in which the druggist had dispensed one ounce and a half of laudanum by mistake for the same quantity of black draught. The evidence at the inquest clearly showed that the lady took the draught at half-past six in the morning; that at nine her husband went into her room, when she spoke to him, but appeared as if she had been asleep; that at half-past ten the housemaid went in to ask her if she wanted anything, as she and the cook were going out for the day, according to previous arrangement, and that she answered quite correctly, and gave directions about several things, and the servant did not notice anything particular in her manner. This is the remarkable point, and the case is mentioned here because it is of interest in a medico-legal point of view to record that five hours may elapse after the taking of an ounce and a half of laudanum by a person unaccustomed to its use, and on an empty stomach, and followed by no vomiting, and yet not sufficient effect ensue to excite any suspicion or alarm. The poor lady was not seen again till four o'clock, and then she seemed to be asleep, and was left for another three hours before medical assistance was procured, too late to be of any avail. She died twenty-two hours after taking the poison. The laudanum appears to have been carefully prepared and of the ordinary pharmacopœial strength.

A case of hydrophobia that occurred recently was related at the last meeting of the Medical Institution, by Dr. Turnbull, under whose care the patient was in the Royal Infirmary. The patient, a young man, had been bitten in the mouth by a little dog "that appeared to be sick," about two months previously, and not, as incorrectly stated in the newspapers, seven years before. He only lived three days from the first appearance of the symptoms, which were much the same as are usually found.

On Wednesday last a man living in Toxteth-park was bitten very severely in the hand by a dog that was supposed to be mad, and on Saturday the same dog bit a lady in the cheek and ear. The surgeon who was called to the latter removed by the knife a portion of the cheek and ear, and afterwards applied the actual cautery and potassa fusa. The dog was at once killed.

Typhus fever which was considerably in excess of the average the first few months of the year in Liverpool, has had its full proportion of victims in the medical profession, not less than four having died of it during the course of the year, two of them, Mr. Swift and Dr. Sayer, quite lately.

Liverpool, November 2nd, 1863.

## BRIGHTON.

(FROM OUR OWN CORRESPONDENT.)

DURING the last few days the new works lately added to the Brighton town drainage, and as yet scarcely complete, have had a severe trial consequent on the heavy gales and at the same time falls of rain; the storm water from rain, added to the sewage, came into collision with the flood tide and proved victorious, flowing steadily into the sea. As this new work is a peculiar phase in drainage history it is worthy of a passing remark. The ordinary town sewage delivered at this spot is computed at about 300,000 gallons per hour in dry weather, but when heavy rain falls it is impossible to estimate the quantity save by a very wide approximation; an idea may be formed, however, for on June 27th as much as 25,000,000 gallons passed per hour.

To meet the additional flow of such a body of water, this new drain has been constructed, consisting of a large brick chamber so contrived that the town sewage flows into it and is passed to the sea by a three-foot diameter pipe on the floor of the chamber. This answers the ordinary wants of the town, but when a rush of rain water pours down the drains and is added to the sewage, the surface water flows over a weir twelve feet high, and so passes into the sea at what is called the storm outlet, the solid sewage meanwhile passing steadily down the three-foot pipe. The line of this weir is four inches above high-water mark, and can be raised higher; so that the sea cannot force back the storm water and sewage, flooding the cellars, as heretofore.

It is proposed to carry this drainage pipe 1760 feet into the sea. 150 feet only are laid down; from the lateness of the season it may be spring-time ere the length is complete. The new work will cost £7000, and to efficiently drain the town more than ten times that amount must be expended. This is not overstating the need of good drainage, since it is a fact that but one-third of the town is sewer-drained; the remaining two thirds being by cesspools, or by means of old wells and tanks. Nevertheless the population is steadily on the increase. Were Brighton drained as it could and ought to be, it would undoubtedly be the healthiest town on the south coast. All things urge the Town Council to be active in the work to be done, ere some other town arise, more attentive to hygiene, and attract the wealthy population away from "London-super-Mare."

A curious case and one showing the value of chemical investigation, occurred at the Dispensary last week. A girl, aged sixteen, presented herself, complaining of intolerable thirst and enormous quantity of urine; she drank night and day, she said, water to between four and five gallons. Her urine, specific gravity 1004, was tested by every test for sugar, but none found. Some other cause than diabetes was assigned, when, on close questioning as to whether all the drink was water, it came out a little was beer, and finally the whole quantity was beer!

Brighton, November 3rd, 1863.

# Foreign Department.

### SYPHILIS COMMUNICATED BY VACCINATION.

WE consider the following details of great importance, and advise our readers to note them with care. The case was brought before the Surgical Society of Paris, and the phenomena verified by Messrs. Cullerier and Guersant:—A child, two years old, who had been nursed by its mother, weaned for the last six months, and had never had any symptoms of hereditary syphilis, was vaccinated on the 27th of June of this year. The vesicles began two or three days after the operation, and had fully formed on the ninth day. They dried up, and the crusts fell about a fortnight after vaccination. As the scars appeared quite normal and well-formed, the mother gave up watching the child's arm. A few days afterwards, however, she noticed three ulcerations forming on the scars, one on the left arm and two on the right. These ulcerations began to suppurate, became larger, and reached the size of a fourpenny piece. On the right side they were covered by a crust rather thick on the circumference and thin in the centre. They gave no pain, and were situated on a hardened base. The ulceration on the left arm presented about the same appearances, but was somewhat inflamed, the centre being free from crust. On the right arm there were also seen two normal scars; and two on the left, the one being normal, the other, however, presenting a papular eminence. The glands of the axilla were enlarged on both sides, and those at the back of the neck, also, somewhat tumefied. The submaxillary region on the left side presented likewise a few enlarged glands. On the head there were no crusts, the arms were sound, and the fauces unaffected. A copper-coloured papule, covered with grey scales, was seen under the right ear, and offered quite a characteristic aspect. A red and slightly raised eruption was observed on the chest, stomach, and back, the red colour being coppery in certain places, especially on the upper part of the chest. The rest of the skin was sound. M. Chassaignac, under whose care the child has been, ordered baths, in which corrosive sublimate should be dissolved, and gave, besides, some drops of "liquor of Van Swieten."

### THE GENERAL MEDICAL ASSOCIATION OF FRANCE.

This fine institution, which now numbers 5746 members scattered over the whole country, held its fifth annual meeting at Paris, on the 1st inst., under the presidency of M. Rayer. There are now ninety branch societies, which, with the central society of Paris, form this hugh association, whose aim is to assist professional brethren in need, and to uphold the dignity and rights of their body. The balance in hand, after granting pecuniary assistance to a great many medical men, and all expenses paid, is £11,000. It should be borne in mind that the founder of this powerful association is M. Amédée Latour, the talented editor of *L'Union Médicale*. The opposition this indefatigable man met with originally might to others have appeared overwhelming, but he persevered, and has achieved a work which, in years to come, will shed glory on his name.

### TRIAL OF WOORARA IN TETANUS.

Dr. Schuh, of Vienna, had recently under his care a man of twenty-six, whose hand had been shattered by the bursting of a gun. The lacerated wound gave rise to tetanus, and this serious complication was combated by subcutaneous injections with a solution of one grain of woorara in 140 drops of spirit, the quantity of the injected fluid being gradually increased. Some alleviation was obtained after about three grains had been used, but the patient died ten days after the accident.

### THE CAUSE OF BLENNORRHŒA.

M. Demarquay, of Paris, contends that this teasing complaint is often owing to narrowing of the meatus, which he conceives to become inflamed and irritated by stagnation of the urethral secretion, and advises slitting of the meatus with the knife. This is rather rough practice.

### SUPPOSED CRIMINAL ABORTION IN ITALY.

*L'Imparziale* of Florence states that Dr. Zinizio has just been acquitted, after a trial for criminal abortion. The editor congratulates his professional brother on the issue with great warmth; but omits what would have been of practical value—viz., the report of the trial.

YELLOW FEVER IN MEXICO.—The yellow fever has committed fearful ravages on the coast. It has been even more virulent this year than it was last; few seized appear to have recovered. In such a state of things it is satisfactory to learn that out of 1460 Egyptian troops stationed at Vera Cruz only sixteen have died. How different would have been the result had that post been garrisoned by European troops!

# Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 29th ult.:—

Gervis, Frederick Heudebourck, St. Thomas's Hospital.
Leach, Matthew, Wisbeach, Cambridgeshire.

The following gentlemen also on the same day passed their first examination:—

Henderson, Frederick William, Guy's Hospital.
Iles, Daniel, St. Thomas's Hospital.
Milburn Frederick Le Feve, Charing-cross Hospital.
Reed, Walter Hugo, St. Thomas's Hospital.
Wells, James, Bristol Medical School.

WE hear with great regret that the venerable President of the Medical Council is so seriously indisposed as to be confined to his house.

THE GRESHAM LECTURES on Physic for the Michaelmas term will be delivered on the 6th and 7th inst., by H. H. Southey, M.D., F.R.S.

MUNIFICENT LEGACY.—Mr. Daniel Darby, of Rowley, lately deceased, has bequeathed the munificent sum of £10,000 to the Birmingham General Hospital.

SHANGHAE.—A recent letter from Shanghae states that cholera and small pox are very prevalent. Many deaths have also occurred from sun-stroke.

WESTMINSTER HOSPITAL.—The collections made at the "Thanksgiving" services at Westminster Abbey on Sunday, the 25th ult., have been presented by the Dean and Chapter to the funds of the Westminster Dispensary.

MEDICAL OFFICERS' SALARIES.—At the last meeting of the Vestry of St. George the Martyr, Southwark, the salary of the medical officer of health was increased to £150 per annum: a very judicious, and we believe necessary, step.

ST. THOMAS'S HOSPITAL.—The Committee of the united parishes of Southwark and its neighbourhood have presented a memorial to the Common Council of the City, praying that the hospital be not removed to the site "provisionally" chosen at Stangate.

THE BIRMINGHAM ANNUAL COLLECTIONS made in all the churches and chapels of the town, and devoted in rotation to the various public charities, have amounted this year to about £2600, which has been given to the Queen's Hospital.

VACCINATION. — Dr. Stevens, the commissioner appointed by the medical department of the Privy Council, has found the results of vaccination generally successful. In one instance (the Winsford district, York) 95 per cent. of the children had been vaccinated.

UNIVERSITY OF LONDON.—The examinations in Medicine are now progressing. The excellent practical examinations of the University are conducted at various hospitals in succession. The practical examination of patients in the ward this year takes place at St. Mary's Hospital, the examiners being Dr. Sibson, F.R.S., and Dr. Parkes, F.R.S.

THE INFLUENCE OF THE COTTON FAMINE ON THE RATE OF MORTALITY was the subject of a lecture by Dr. Noble at the last annual meeting of the Statistical Society of Manchester. He said he had the best grounds for stating that within the last two years there had been no unusual mortality in the cotton districts. The fluctuations of 1862 were attributable to the prevalence of whooping-cough, measles, small-pox, and scarlet fever.

FRENCH AND ENGLISH ARMY HOSPITALS. — Dr. H. B. Franklyn, surgeon, 1st Battalion 10th Foot, in a letter to *The Times*, states that, with respect to the special diseases which form the bulk of admissions to the English army hospitals, the French are more fortunate than ourselves. In 1858 the admissions to the hospitals in Paris were 24 per 1000 men, while at Aldershott they were 411 per 1000, and at Woolwich 512 per 1000. Sometimes it fell in Paris to 16 per 1000. In Marseilles, the worst French garrison, it reached 113 per 1000.

MIDWIFERY QUALIFICATIONS.—The governors of the Coombe Lying-in-Hospital, Dublin, with a view of inducing their pupils to seek for the Midwifery diploma of the Colleges of Surgeons or Physicians, have engaged to pay one guinea towards the expenses of each of their students taking those diplomas, who may have attended the courses of lectures delivered by Dr. Sawyer or Dr. Ringland.

OXFORD UNIVERSITY.—In a convocation held on Thursday, G. Rolleston, M.D., H. J. S. Smith, M.A, and Sir B. C. Brodie were appointed examiners in the first examination for the degree of Bachelor of Medicine, and J. W. Ogle, M.D., and H. Monro, M.D., in the final examination.

PRESIDENCY OF ST. BARTHOLOMEW'S HOSPITAL.—In consequence of the death of Mr. Alderman Cubitt the threatened litigation respecting the presidency of St. Bartholomew's Hospital, noticed in our last number, will necessarily be abandoned.

BATH UNITED HOSPITAL.—A new wing is about to be added to the Bath United Hospital, and other essential improvements effected, the cost of which is estimated at £7500. Additional property is also to be purchased of the value of £2000. Towards this sum of £9500, £3000 has been raised by the Prince Consort Memorial Committee.

ANOTHER VILLAGE HOSPITAL. — The working men of Weston-super-Mare are on the point of establishing a village hospital. The movement originated with one of their number, and upwards of £160 have been collected for the purpose in pence alone.

PLYMOUTH PUBLIC DISPENSARY.—At the last (sixty-fifth) Annual General Court of the Governors, Dr. Joseph Collier Cookworthy, M.D. Univ. Edin., the Senior Physician, tendered his resignation after a service of fifty years. A resolution was passed requesting the committee "to appoint Dr. Cookworthy Consulting Physician," and that request will doubtless be carried into effect; but one of the speakers suggested that some more substantial testimony should be given of his services. His last act as Physician, was to read a most elaborate report, prepared and signed by himself, which not only gave a summary of the work performed by the institution, but contained statistics and details of the general mortality of the town, the labour of which, as the chairman, Dr. Yonge, remarked, "was such as no one but a medical man could fully appreciate."

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—At a meeting of the Royal College of Surgeons of Edinburgh held on the 21st ult., the following office-bearers were elected for the ensuing year:—President: Mr. Benjamin Bell.—Treasurer: Dr. John Gairdner.—Librarian: Dr. Archibald Inglis.—Secretary: Dr. James Simson.—President's Council: Dr. Richard Huie, Dr. William Dumbreck, Dr. Archibald Inglis, Dr. Andrew Wood, Dr. Robert Omond, Dr. P. S. K. Newbigging, Dr. James Dunsmure, Mr. James Spence, Dr. Peter David Handyside, Dr. James D. Gillespie.—Assessors to Examiners: Dr. David Maclagan, Dr. James S. Combe, Mr. James Syme, Dr. Samuel A. Pagan.—Conservator of Museum and Registrar of Students' Tickets: Dr. William R. Sanders.—Officer: Mr. John Dickie.

FINE ARTS.—An esteemed production of Raphael Morghen, "The Aurora," the property of the late Mr. W. Fisher Moore, of Preston, an old member of the College of Surgeons, was sold by auction last week. The print, which did not appear to be a proof, though it was advertised as such, was knocked down at £115, which is a high price when contrasted with the amount realized for "a most rare proof before any letters," from the same plate, which was sold, among other valuable prints, in June, 1862, by Messrs. Sotheby and Wilkinson, for £110 5s. Mr. Moore purchased the print of a dealer in Preston, who did not know the value of the treasure he possessed, for £5.

# Obituary.

## WILLIAM BREWER, Esq., M.R.C.S.

WE have to record the death of the oldest member of the Royal College of Surgeons, Mr. William Brewer, of Monmouth, who died at the patriarchal age of ninety years. He was a good example of the old-fashioned provincial practitioners, undertaking with the greatest cheerfulness the most arduous duties of a practice which embraced a large extent of country. Mr. Brewer was born at Newport, Monmouthshire, and became a pupil and friend of Abernethy, for whom, during his residence in London, he usually prepared his subjects for anatomical lectures. He became a Member of the Royal College of Surgeons in 1796, and although entitled to the fellowship when the regulations were altered, he had given up all care for titles. He was elected one of the coroners for the county of

Monmouth, which office he filled for fifty-one years. He took great interest in the prosperity of Newport, and was elected one of the commissioners for the improvement of the town. In 1819 he was elected mayor, and re-elected in 1825, and during the period of the riots, in 1839, he was most active in preserving the peace of the town. He retired nominally from active practice at the age of eighty-five, but continued to exert himself gratuitously until the last. As an expert surgeon and skilful anatomist, and as a just magistrate, he was universally esteemed.

## MEDICAL VACANCIES.

Coventry and Warwickshire Hospital—House-Surgeon.
Royal South London Dispensary—District Surgeon.

## MEDICAL APPOINTMENTS.

J. C. AGNIS, F.R.C.S.E., has been appointed Junior Surgeon to the West London Hospital, vice Teevan, promoted.

J. ALEXANDER, L.R.C.S.Ed., has been appointed a Public Vaccinator by the Parochial Board of Leslie, Fifeshire.

G. BARTLET, M.R.C.S.E., has been appointed a Public Vaccinator by the Parochial Board of Forgue, Aberdeenshire.

J. W. BEAUMONT, M.D., has been appointed Medical Officer for the newly formed District No. 2 of the Ecclesall-Bierlow Union, Yorkshire (the Districts throughout the Union having been re-arranged).

G. BOOKER, M.R.C.S.E., has been appointed Medical Officer for the newly formed District No. 5 of the Ecclesall-Bierlow Union.

J. BRIDSON, M.D., has been elected Surgeon to the Isle of Man General Hospital and Dispensary, Douglas, Isle of Man, vice H. N. Scarff, M.R.C.S.E., deceased.

J. CLAYTON, M.R.C.S.E., has been appointed a Public Vaccinator by the Parochial Board of Banff.

J. CRUICKSHANK, M.R.C.S.E., has been appointed a Public Vaccinator by the Parochial Board of Forgue.

MR. J. S. FERRIS has been elected Resident Physician-Accoucheur to King's College Hospital.

W. GRAHAM, L.F.P. & S. Glas., has been appointed a Public Vaccinator by the Parochial Board of Cardross, Dumbartonshire.

G. GRAY, M.R.C.S.E., has been appointed a Public Vaccinator by the Parochial Board of Insch, Aberdeenshire.

J. GREGORY, M.R.C.S.E., has been appointed Medical Officer for the newly formed District No. 3 of the Ecclesall-Bierlow Union.

H. GRIBBIN, M.D., has been elected Medical Officer and Public Vaccinator for the Bangor Dispensary District of the Belmullet Union, Co. Mayo, vice W. H. Bournes, M.D., resigned, and appointed to the Ballycastle Dispensary District of the Killala Union, Co. Mayo.

E. M'KILLIAM, M.D., has been appointed a Public Vaccinator by the Parochial Board of Forgue.

H. L. KEMPTHORNE, L.R.C.P., has been elected House-Physician to King's College Hospital.

A. S. KERR, M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Renvyle Dispensary District of the Clifden Union, Co. Galway, vice G. St. George Tyner, L.R.C.S.I., appointed Resident Surgeon to Dr. Steevens' Hospital, Dublin.

R. KING, M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the District of West Drayton and part of Hillingdon of the Uxbridge Union, vice W. Rayner, M.R.C.S.E., resigned.

M. MACINTOSH, M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the Rotherfield District of the Uckfield Union, Sussex, vice C. R. Williams, M.D., resigned.

J. MACKAY, M.D., has been appointed a Public Vaccinator by the Parochial Board of Birse, Aberdeenshire (for the Eastern Division).

E. A. MALING, M.R.C.S.E., has been re-elected Librarian to the Sunderland Medical Society.

G. B. MORGAN, L.R.C.S.I., has been elected President of the Sunderland Medical Society for the ensuing year.

E. PARKER, F.R.C.S.Ed., has been appointed North Divisional Surgeon to the Liverpool Police Force, vice H. Swift, M.R.C.S.E., deceased.

W. PERCIVAL, M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the All Saints and the St. Andrews Districts of the Northampton Union, vice G. Olive, M.R.C.S.E., deceased.

E. POLLOCK, M.R.C.S., has been elected House-Surgeon to King's College Hospital.

T. S. ROWE, M.D., has been elected Surgeon to the Royal Sea-Bathing Infirmary, Margate, vice G. H. Hoffman, M.R.C.S., resigned.

J. RUST, M.D., has been appointed Medical Officer and Public Vaccinator for the Borrowby District of the Northallerton Union, Yorkshire, vice J. Dale, M.R.C.S.E., resigned.

R. SPENCE, M.D., has been appointed a Public Vaccinator by the Parochial Board of Linlithgow.

T. A. STEPHENSON, M.R.C.S.E., has been elected President of the Nottingham Medico-Chirurgical Society.

W. F. TEEVAN, F.R.C.S.E., has been appointed Surgeon to the West London Hospital, vice C. Heath, F.R.C.S.E., resigned.

J. T. THOM, M.D., has been appointed a Public Vaccinator by the Parochial Board of Fetteresso, Kincardineshire.

J. TURNBULL, M.D., has been appointed a Public Vaccinator by the Parochial Board of Dunbar.

W. WATSON, M.D., has been appointed a Public Vaccinator by the Parochial Board of Leslie, Fifeshire.

W. R. WATSON, L.R.C.S.Ed., has been appointed a Public Vaccinator by the Parochial Board of Aboyne, Aberdeenshire, and by the Parochial Board of Birse (for the Western Division).

V. WEARNE, M.R.C.S., has been elected House-Surgeon to the Devonport, Stonehouse, and Cornwall Hospital and Eye Infirmary.

F. A. WILLINGTON, M.R.C.S.E., has been appointed Medical Officer for the newly formed District No. 1 of the Ecclesall-Bierlow Union.

J. WILSON, L.R.C.P.Ed., has been elected Medical Officer and Public Vaccinator for the Danby District of the Guisborough Union, Yorkshire, vice J. F. Mackreth, L.R.C.P.Ed., resigned.

K. WILSON, M.D., has been appointed Medical Officer for the newly formed District No. 4 of the Ecclesall-Bierlow Union.

H. J. YELD, M.D., has been elected Secretary and Treasurer to the Sunderland Medical Society.

## MILITARY AND NAVAL MEDICAL APPOINTMENTS.

F. BARNWELL, Staff Assist.-Surg., has been appointed to afford medical aid to a Squadron of the 12th Bengal Cavalry, Jubbulpore, in addition to his other duties, vice Surg.-Major C. B. Craske.

H. V. CARTER, M.D., Assist. Surg. Bombay Service, has been appointed to act as Civil Surgeon at Sattara.

H. COOK, M.D., Assist.-Surg. Bombay Service, Civil Surgeon at Sattara, has been appointed to act as Superintendent at Mahableshwur, vice Lord.

A. CROKER, L.R.C.S.I., Staff Assist.-Surg. Bengal Service, has been directed to assume medical charge of the 7th Bengal Cavalry, and afford medical aid to the 2nd Native Infantry, Moultan, in addition to his other duties.

A. J. DALE, Civil Assist.-Surgeon Bengal Service, has been appointed to the medical charge of a detachment of the 20th Foot at Jounpore, in addition to his other duties, vice Assistant-Surg. Kelsall.

W. J. EAMES has been confirmed to the rank of Surgeon R.N.

J. FISHER, L.R.C.S.I., Surg. R.N. March 12th, 1863, has been appointed to the "Royalist."

W. FLEMING, Assist.-Surg. Bombay Service, has been placed on general duty Bombay Garrison.

J. A. GUISE, Deputy Inspector-General of Hospitals Bengal Service, temporary rank, has been promoted to Deputy Inspector-General of Hospitals, with permanent rank, in succession to Deputy Inspector-General of Hospitals J. Balfour, retired.

J. H. HEARN, L.F.P. & S. Glas., Assist.-Surg. E Battery 11th Brigade Royal Artillery, Futtegurh, has been appointed to the medical charge of the Left Wing of the 10th Native Infantry and a Troop of the 3rd Bengal Cavalry, in addition to his regimental duties, vice Civil Assist.-Surg. G. Grant, resigned.

R. G. LORD, M.D., Surgeon Bombay Service, has been appointed Acting Civil Surgeon at Poona, vice Dr. Maitland.

D. MACKENZIE, Assist.-Surgeon Madras Service, has been posted to the 24th Native Infantry.

R. MANTELL, M.B., Assist.-Surg. F Battery 5th Royal Horse Brigade, Bengal, has been ordered to officiate as Medical Storekeeper and Staff Surgeon, in addition to his other duties, or until further orders.

E. MENZIES, Staff Surg.-Major in charge of the Kidderpore Hospital, has been transferred to the "Bentinck" Hospital Ship.

H. E. OSWALD, M.D., Assist.-Surg. Bengal Service, in medical charge of the Nuggur Division, has been appointed to the medical charge of the Mysore Commission during the absence on leave of Dr. Fitzpatrick.

J. M'L. PEMBERTON, Assist.-Surg. Indian Service, Civil Surgeon of Hoshearpore, has been appointed Residency Surgeon at Hydrabad.

C. PLANK, M.D., Assist.-Surg. Indian Service, Superintendent of the Central Prison at Agra, has been invested with the powers of a Magistrate to be exercised within the precincts of the Jail.

J. B. C. READE, L.R.C.S.Ed., Assist.-Surg. Rifle Brigade, has been directed to take medical charge of the Royal Artillery Division at Delhi, vice Assist.-Surg. H. Cookson.

G. D. RIDDELL, Assist.-Surg. 8th Bengal Native Infantry, has been appointed to officiate in medical charge of the 1st Cavalry Hydrabad Contingent during the absence of Assist.-Surg. Sanderson, or until further orders.

G. J. SHAW, M.D., Surg. Madras Service, Assay Master, has been directed to take charge of the Office of Commissioner of the Department of Issue of Paper Currency at Madras pending the appointment of a Master of the Madras Mint in succession to Col. C. A. Orr.

J. C. SHAW has been appointed Civil Assist.-Surg. of Jessore.

G. SMITH, M.D., Surg. Madras Service, has been directed to take charge of the Lying-in Hospital and Penitentiary during the employment of Dr. Aitken on other duty, or until further orders.

J. SQUIRE, Surg. 20th Bengal Native Infantry, has been transferred to the 16th Native Infantry, vice Surg.-Major R. R. Kinsey, promoted.

J. P. WAY, M.R.C.S.E., Acting Assist.-Surg. R.N., has been appointed to the "Royalist."

G. E. WHITTON, M.B., Assist.-Surgeon attached to the C Battery of the Royal Artillery, has been appointed to act in medical charge of the Nuggur Division.

# Births, Marriages, and Deaths.

## BIRTHS.

On the 26th ult., at Sloane-street, the wife of C. G. Brown, M.D., of a daughter.
On the 26th ult., at Stirling, the wife of Dr. Findlay, of a daughter.
On the 27th ult., at Aldershott, the wife of L. C. Stewart, Staff Surg.-Major, of a son.
On the 28th ult., at Sydenham-road, Croydon, the wife of Dr. R. S. Sinclair, of Bombay, of a son.
On the 30th ult., at Nice, the Dowager Lady Nepean, wife of Dr. Montague Kirkman, of a daughter.
On the 31st ult., at Surbiton, the wife of W. P. Jones, M.D., of a son.
On the 3rd inst., at Vicarage-place, Kensington, the wife of John C. Vawdrey, M.R.C.S.E., of a daughter.
On the 3rd inst., at Budleigh-Salterton, Devon, the wife of J. B. Murphy, M.D., of a son.

## MARRIAGES.

On the 20th ult., at St. Luke's, Old-street, George Eugene Yarrow, M.R.C.S. Eng., of Central-street, E.C., to Anne, eldest daughter of George Gallatly, Esq., of the same place.—No Cards.
On the 29th ult., at Christ Church, Walmersley, Frank Nuttall, M.R.C.S., of Bury, to Sarah Anne, second daughter of the late Robt. Chadwick, Esq.
On the 4th inst., at Bloxham, Oxfordshire, W. W. Hyde, M.R.C.S.E., to Catherine Elizabeth, daughter of the late J. Davis, Esq.

## DEATHS.

On the 30th of Aug., at the Seamen's Hospital, Hong-Kong, of fatty degeneration of the heart, Dr. John Ensone, Resident Surgeon to that institution.
On the 2nd inst., at Northallerton, Yorkshire, Christopher Dighton, M.R.C.S. Eng., aged 74.
On the 2nd inst., H. Warren, M.R.C.S., of Park-road, Regent's-park, formerly of Bryn-Morda, Oswestry, aged 44.
On the 2nd inst., at Rotherhithe, Hannah Maria, the wife of W. S. Hallen, M.R.C.S.E.

# Medical Diary of the Week.

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| MONDAY, Nov. 9 | ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 1½ P.M.<br>METROPOLITAN FREE HOSPITAL. — Operations, 2 P.M.<br>MEDICAL SOCIETY OF LONDON.—8½ P.M. Mr. Wm. Adams, "On the Treatment of Disease of the Spine and Angular Curvature." |
| TUESDAY, Nov. 10 | GUY'S HOSPITAL.—Operations, 1½ P.M.<br>WESTMINSTER HOSPITAL.—Operations, 2 P.M.<br>ETHNOLOGICAL SOCIETY.—8 P.M. Mr. John Crawfurd, "On the Commixture of the Races of Man as affecting the Progress of Civilization: Eastern Asia and the Asiatic and Polynesian Islands.—Mr. Simon Casie Chitty Manicgar, "On a Correct Outline of the Classification of the Tamul Casts."<br>ROYAL MEDICAL AND CHIRURGICAL SOCIETY OF LONDON.—8½ P.M. Dr. Rowand, "On the Treatment of Frost-bite by Friction with Snow and Incisions."—Mr. Holmes Coote, "On Cancerous Infiltration of the Penis." — Mr. A. Durham, "On Mucous Cyst of the Epiglottis, treated by Incision." |
| WEDNESDAY, Nov. 11 | MIDDLESEX HOSPITAL.—Operations, 1 P.M.<br>ST. MARY'S HOSPITAL.—Operations, 1 P.M.<br>UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M. |
| THURSDAY, Nov. 12 | ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.<br>CENTRAL LONDON OPHTHALMIC HOSPITAL — Operations, 1 P.M.<br>LONDON HOSPITAL.—Operations, 1½ P.M.<br>GREAT NORTHERN HOSPITAL, KING'S CROSS.—Operations, 2 P.M.<br>LONDON SURGICAL HOME.—Operations, 2 P.M.<br>WEST LONDON HOSPITAL.—Operations, 2 P.M.<br>ROYAL ORTHOPÆDIC HOSPITAL. — Operations, 2 P.M. |
| FRIDAY, Nov. 13 | WESTMINSTER OPHTHALMIC HOSPITAL. — Operations, 1½ P.M. |
| SATURDAY, Nov. 14 | ST. THOMAS'S HOSPITAL.—Operations, 1 P.M.<br>LOCK HOSPITAL, Dean-street, Soho.—Clinical Demonstrations and Operations, 1 P.M.<br>ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.<br>KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.<br>ROYAL FREE HOSPITAL.—Operations, 1½ P.M.<br>CHARING-CROSS HOSPITAL.—Operations, 2 P.M. |

# To Correspondents.

### PUBLIC VACCINATORS.

WE have received a correspondence between some gentlemen officiating as public vaccinators in one of the midland counties and the Privy Council. It states that these gentlemen were required to attend at a considerable distance to confer with a Commissioner deputed by the Privy Council for that purpose. They petitioned the Council for remuneration for the time occupied in what they regarded as a public service. In reply, they were informed that the Council had not any funds out of which they could make such payment. One of the surgeons, writing to us on the subject, says—

"The object of the petition is to show one at least of the departments of the Government that medical men ought not to be called upon to give their attendance without pay. No public office would treat lawyers thus. I hope my medical brethren will take warning, and not attend these or any like inquiries without remuneration. I have suppressed the name of the union and the names of my colleagues. I enclose my own name."

*Tyro.*—Thomas de Quincey's fame rests on a number of standard works, one of the best known of which is the "Confessions of an English Opium Eater." In reference to the second question, a private note shall be sent if "Tyro" will forward us his name and address.

*Mr. J. J. Burnet* is thanked for his communication.

IF *M. N. O.* be really a medical practitioner, he need not be informed that either of the practitioners named is perfectly competent to treat the affection.

### CASE OF OBSTINATE PRURIGO.

*To the Editor of* THE LANCET.

SIR,—If any of your readers can assist me to cure or relieve the following case, I shall be obliged:—

A. B—— has suffered for more than twenty years from ovarian dropsy. For several years past she has suffered terribly from intense itching, so that she rarely or never gets a night's rest. Sometimes it commences in the rectum, sometimes in the labia, extending more or less up the vagina; sometimes near the ankle, and sometimes in different parts of the thigh and groin. It is described as if a thousand bees or insects were stinging the parts, and she feels as if she must go mad or into hysterics, so great is the intensity of the suffering. The desire to rub and scratch is irresistible, and is often continued until the blood flows. She is upwards of sixty years of age; no family. She has been tapped twice without relief. Ointments of lead, prussic acid, belladonna, as well as lotions of the same, have been tried in vain; leeches, cold-water injections into the rectum, and the solution of nitrate of silver have also failed; quinine, colchicum, iodide of potassium, Brandish's solution of potash, and sedatives have been tried in vain also, as well as the warm bath. The uterus and rectum are healthy; no piles; no leucorrhœa; no oscarides.

I am, Sir, your obedient servant,

November, 1863. M.

### BEANEY *v.* FITZGERALD.

WE received by the last Australian mail a series of journals and some private communications respecting this case. Mr. Fitzgerald withdrew the main imputation that Mr. Beaney held a doubtful diploma, seeing that Mr. Beaney is a Fellow of the College of Surgeons of Edinburgh, and has served with credit in the Army Medical Service. Neither party is without blame in the matter, and we do not think it conducive to the dignity or interest of the profession to notice this unseemly Victorian squabble at length. We regret greatly to perceive frequent indications of a want of harmony amongst the profession in Australia, and earnestly counsel a more general cultivation of those feelings of mutual consideration and respect for professional propriety which we are happy to believe daily gain ground more firmly in this country.

*A Doubtful Inquirer.*—He can recover reasonable charges for attendance and medicine.

### THE DIGNITY OF DRESS.

*To the Editor of* THE LANCET.

SIR,—Every year brings something fresh before us in the pages of your valuable LANCET. Last year hundreds were brought fresh to St. Andrews to be capped, and now the topic of the day is "Dignity of Dress." What designation can we give of this? Is it the hood, cap, and gown that are worn at the different Universities that dignify the man? These are all well enough whilst at the seat of the University; but if they must be donned *ad libitum* by the hundreds who have got their degrees from St. Andrews or Aberdeen of late years, who perhaps were never in a University in their life until they took their money in their pockets for their diploma, there will be no dignity in the hood, cap, or gown. Is it not those graduates who are so ambitious for dignity of dress? The man of skill, however humbly attired, is dignified. Look back at our Baillies, Harveys, Hunters, Jenners, and a host of others, and see how humble, yet dignified, were they.

I believe this regalia or outward show could be dispensed with even at our law courts or in our pulpits. The Wesleyan body very properly object to their ministers wearing gowns, &c., on the ground that they are afraid the younger ministers would be admiring themselves so much that they would forget their religion. Thus the old practitioner might say of the young graduate that he would admire his dress so much, he would forget his mission.

I am, Sir, yours, &c.,

November, 1863. MEDICUS.

*To the Editor of* THE LANCET.

SIR,—In answer to your correspondent, "M.R.C.S.," who asks what distinguishing mark is to be granted him, I beg leave to say that, inasmuch as the graduates of the different Universities would be robed in their gowns and hoods, "M.R.C.S." would require no other than his ordinary dress to show that he belonged to a Surgical College, and not to a University.

I believe that the adoption of the gown and hood by graduates of Universities would elevate the profession in the eyes of the public; but would be looked upon with contempt if assumed also by members of the Colleges of Surgeons and licentiates of the Societies of Apothecaries.

I remain, Sir, your obedient servant,

October, 1863. C. S. M. P.

*S. S.*—Musk is very little employed in medicine. It is too expensive, and probably not any better than many other nervine stimulants and anti-spasmodics which we possess. The use of matico was introduced about fourteen years back. It is a well-known astringent.

THE communications of *Dr. Lory Marsh* and *Dr. Dyer* shall receive attention next week.

### POST-PARTUM HÆMORRHAGE.

*To the Editor of* THE LANCET.

SIR,—Can any of your readers inform me if they have ever given the tincture of sesquichloride of iron during the last month of pregnancy in persons predisposed to the above, and with what result?—Yours obediently,

November, 1863. M.B. LOND.

*T. T.*—Quite unprofessional. We are glad to find from the letter of Mr. Jacobs, in the last number of the *British Journal of Dental Science*, that "the Odontological Society very properly discountenances the introduction of any secret preparation on the part of its members." We would go further with him, and ask that it would "prevent as far as lies in its power the use in the profession of any secret preparation whatever."

### SATURATING PROPORTIONS.

*To the Editor of* THE LANCET.

SIR,—Will any of your readers kindly inform me whether it is possible to tell *à priori* the quantity of citric acid required to neutralize or saturate a given weight of a potash salt—the bicarbonate, for instance?

We are taught in the elements of chemistry that chemical substances combine in the proportion of their equivalent numbers. Therefore *à priori* we have a right to expect that, given the combining or equivalent number of citric acid and potash for example, we can predicate what amount of citric acid will neutralize or saturate a given weight of bicarbonate of potash; because we know how much K O is contained in this portion, therefore we can deduce the required amount of citric acid. The difference of opinion amongst the leading chemists regarding the combining number of organic acids, such as the citric, appears to me strange, as one would think it easily deducible from the sum of the weights of the constituent of a salt. For instance, let $x$ be the weight of a quantity of citrate of potash. Find by analysis the weight ($y$) of the potash; then $x-y$ = weight of citric acid, therefore its combining number. We all know that in every work on Materia Medica the saturating numbers *are* given, but it is impossible to *remember* them without knowing the *reason*; whereas it would be always easy to calculate them from the equivalent numbers of potash, &c. I have looked in vain for a solution of my difficulty in Phillips' translation of the Pharmacopœia Londinensis, which is so admirable a treat se in the way of explaining chemical combination by number, and also Pereira's Materia Medica, which work also abounds in diagrams. Does Dalton throw any light on the subject?

Perhaps any of your readers who take an interest in questions of this nature will kindly assist me, or refer me to some book on the subject.

I remain, Sir, yours, &c.,

November, 1863. A STUDENT OF CHEMISTRY.

*Junior.*—Rachitism is essentially a developmental disorder. Give cod-liver oil in union with the phosphate of lime. The administration of the latter agent has been slighted on account of the supposed insolubility of the phosphate. Dr. Watt, an American dentist, fed a dog for thirty-six hours upon this substance alone, and upon opening the animal at the expiration of that time found it all dissolved. It may be insoluble out of the stomach, but it is soluble within.

*C. E. L.*, (Mon.)—Dr. Francis Hawkins, 32, Soho-square, London.

### BICHROMATE OF POTASS IN SYPHILITIC IRITIS.

*To the Editor of* THE LANCET.

SIR,—Dr. Wolfe has been using the bichromate of potass in more than twenty cases of syphilitic iritis with marked success. It has been administered to in-patients, as well as to some who laboured under that affection were still obliged to follow their occupation, and were exposed to all kinds of weather. The following may be taken as an example of the cases referred to:—

Mary M——, aged twenty, was admitted into the Lock ward on June 6th, 1863. On admission, she was suffering from syphilitic sore-throat; there were several large ulcers on the palate and pharynx, and a copper-coloured eruption on the skin. A few days after admission, a bubo appeared on each groin, and also sores on the nymphæ. Under the local treatment of proto-nitrate of mercury and the internal administration of iodide of potassium and opium, she was in the way of improvement, when she was seized with violent irido-choroiditis of the left eye, with marked symptoms of sympathetic retinitis. For this she was successively treated with calomel and opium and the turpentine mixture, but with no effect.

Dr. Wolfe was then requested to see her. He discontinued the mercurial treatment, and ordered the following prescription:—Bichromate of potass, sixteen grains; opium powder, twelve grains; syrup, sufficient quantity to make 100 pills: one morning and evening, to be gradually increased until six are taken daily. Under this treatment she recovered in a few days, and was discharged cured.

In his clinical remarks on this case, Dr. Wolfe stated that the therapeutic agent in question had been suggested ten years ago by a French surgeon, and favourably reported on by M. Desmarres after several years' trial. It is superior to the mercurial preparations, and is free from their disadvantages, not only in ophthalmopathy, but in secondary syphilis generally, and deserves the attention of the profession.—I remain, Sir, yours truly,

ALEX. COLLIE, M.D.,
November, 1863. House-Surgeon, Aberdeen Royal Infirmary.

*One who is acquainted with the Facts*, (Manningtree, Essex.)—The conduct of the young physician in question is not consistent with the true *esprit de corps*; yet we cannot think that any good would result from the publication of our correspondent's very temperate letter.

*R. O.*—We shall have no objection to place a history of the case in the columns of THE LANCET, provided it be written by his medical attendant.

*E. M. S.*—Fleetwood Churchill, Maunsell and Evanson, and Tanner.

### TIC DOULOUREUX.

*To the Editor of* THE LANCET.

SIR,—Can any of your numerous correspondents say what will cure or prevent tic douloureux? To afford relief to the sufferer in this case would be very gratefully acknowledged, all medicines and applications having hitherto failed.

Yours truly,
Manchester, November, 1863. MEDICUS.

*Students.*—The 2 and 3 Wm. IV., c. 75, (an Act for regulating Schools of Anatomy,) permits the bodies of certain persons to be appropriated to anatomical purposes, subject to special conditions; but there is no clause rendering it compulsory on the officers of institutions to give up bodies for dissection.

*Mr. Henry Purdon, Jun.*—To the Director-General of the Army Medical Department, Whitehall-yard, London.

*Students.*—Reddened litmus paper is a more delicate test for alkaline urine than is paper stained with turmeric.

### SWALLOWING OF INDIGESTIBLE SUBSTANCES.

*To the Editor of* THE LANCET.

SIR,—The communication of Mr. Hogg anent the swallowing of a brooch, in your journal of October 10th, where he recommended Nature to be let alone, will have many counterparts in the practice of other medical men. In the following case, however, I deviated from the "expectant" system, without any unusual result:—

On Sunday, June 7th last, a boy, four years old, was brought to me by his mother, who said that he had swallowed a farthing just half an hour before her application for advice. The intervening period being so short, the propriety of an emetic occurred to me, and at once some ipecacuanha wine in lukewarm water was administered, which induced copious vomiting, but without bringing up the coin. The little fellow was all along so well, and the stomach seemed to be emptied so thoroughly, that I expressed a doubt of the farthing being swallowed, at least in its metallic condition. The mother, nevertheless, was told to keep her boy in the house, and to pay strict attention when the bowels moved. Though an alvine evacuation was made early next morning, the farthing did not appear; but at eleven A.M. the coin was voided, unaccompanied with any fæces.

This case has no interest beyond the implication, that when the stomach admits an indigestible substance, and manifests no inclination by reversed peristaltic action to get rid of it, it is useless to promote vomiting by medicines. The farthing in this case, by probably immediately exciting the boy's unvitiated stomach to the peculiar movements of digestion, had been pressed into the narrow end of the viscus, or had already escaped through the pyloric orifice, and was therefore beyond the reach of the emetic. Its solitary ejection from the rectum, without the usual fæcal excitant of the sphincter, is an additional proof of the readiness of the whole digestive apparatus to get speedily rid of such an indissolvable intruder.

Please excuse this encroachment upon your space, which is partly justified by the fact that, unless when œsophagotomy is the topic, the mention in some medical books of the introduction of foreign substances into the body is limited to the air-passages, eyes, and ears.—I remain, Sir, yours truly,

Kirkintilloch, October, 1863. W. WHITELAW, M.D.

*Mr. J. C. Smith.*—The answer referred to sessions and assizes, and to cases which had undergone investigation before a police magistrate. In such instances the magistrates have the power of giving a certificate, which will entitle the medical witness to half a guinea per diem for attendance at the police court or petty sessions. In certain instances the magistrate has the power of awarding this fee to a medical witness even where the case has been summarily dealt with.

*Brighton.*—Almost everything has been recommended in whooping-cough, and every six months some new "specific" appears.

### REACTIONS OF URINE.

*To the Editor of* THE LANCET.

SIR,—Perhaps some of your numerous correspondents will kindly inform me to what might be ascribed the reactions in the urine as in the following examination:—

Urine, specific gravity 1015, slightly acid, good colour, but muddy, and on standing some time effervescent; boiling causes a flocculent sediment, and with the addition of liquor potassæ, supernatant liquid becomes quite clear; sediment denser, with dark brown spots intermixed. Nitric acid and heat turn the urine a dark reddish-brown, which after a while precipitates a blackish-brown, heavy sediment, soluble in liquor potassæ.

This patient, a small man, by occupation a coal-trimmer, has suffered lately from weakness and sudden fainting; is anæmic, and examination of the heart detects anæmic murmurs; appetite fair; skin at times dry and harsh, at times moist; bowels irregular; urine natural in quantity. Is invalided for "anæmia." Has been taking citrate of iron and quinine.—Yours, &c.,

R.M.S. *Tyne*, W.I., 1863. R. E. P.

*A Scotch Doctor.*—He can recover his fees in a County Court, provided he be registered according to Act of Parliament.

### ARMY MEDICAL DEPARTMENT.

THE "Suggestions for a New Organisation of the Army Medical Departments of England and India," by a *Deputy Inspector-General*, shall receive the attention which they merit.

### POOR-LAW MEDICAL OFFICERS' ORDERS.

*To the Editor of* THE LANCET.

SIR,—IN THE LANCET for July 11th is a report of a case in which the relieving officer of the West London Union was fined 40s. by Mr. Alderman Copeland for neglecting to comply with the recommendation of the medical officer of the same union respecting some extras for a sick pauper. The Alderman stated also, "I will have the whole of the depositions forwarded to the Poor-law Commissioners."

Can any of your readers inform me if the Board has investigated this case, and given a decision? and if so, what that decision is. It will be regarded with great interest by their medical officers, whose orders for extras are, I fear, too often, as in this case, either wholly disregarded, or *practically* so by their value being deducted from the pauper's weekly relief.—Yours truly,

Lewannick, Launceston, Cornwall, Oct. 1863. H. E. SARGENT, M.D.

### PRESSURE IN ORCHITIS.

*To the Editor of* THE LANCET.

SIR,—For many years I have been annoyed, when treating cases of orchitis by Ricord's plan of compression with strapping, by the excoriation of the scrotum which it produces should the patient take any exercise. Great care is also requisite to make the pressure equal, and from the quick absorption of the enlarged gland frequent tightening is necessary. Under these circumstances, it occurred to me that some simpler mode of continued pressure might be afforded by means of india-rubber. By my directions, Messrs. Millikin and Lawley have prepared three little pyramidical india-rubber bags, which answer the purpose well, are very inexpensive, and easy of application.

Yours very faithfully,
Hounslow, October, 1863. J. R. A. DOUGLAS, M.R.C.S.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Sargent; Mr. J. C. Smith; Mr. C. W. Thorp, (with enclosure;) Dr. Walker, (with enclosure;) Dr. Rowe, Margate; Dr. Watson; Dr. L. Marsh, Nottingham; Mr. J. Smyth, (with enclosure;) Mr. Parker, Bath; Mr. Bain; Mr. Bratt, (with enclosure;) Mr. C. Hunter; Mr. Hill; Mr. Mitchell, (with enclosure;) Mr. Radford, Debenham; Mr. Howell, Aberdare, (with enclosure;) Mr. T. Moore, Cradley, (with enclosure;) Mr. Illingworth; Mr. Serle, Whitehaven, (with enclosure;) Dr. Arnott, Gorleston; Mr. C. Ewington, Margate, (with enclosure;) Dr. Vines; Dr. Harvey, St. Leonards, (with enclosure;) Dr. Yeld; Mr. Ross, Knottingley; Dr. Atkinson; Dr. Goode, Derby, (with enclosure;) Mr. Chitty, (with enclosure;) Mr. Wearne, Helston; Dr. Skinner, Liverpool; Dr. Evans, Narberth, (with enclosure;) Mr. C. Hide, Coventry, (with enclosure;) Mr. Roberts, Ashton, (with enclosure;) Dr. Buchanan, Glasgow; Dr. Crisp; Mr. Gresswell, Louth, (with enclosure;) Dr. Hearne, (with enclosure;) Mr. Sheppard; Messrs. Ferris and Co., (with enclosure;) Mr. Wilde, Dublin; Mr. Robinson; Mr. J. Dunlop, Bushmills; Mr. Biddle, (with enclosure;) Mr. Larkin, (with enclosure;) Mr. Fisher, (with enclosure;) Mr. Brady, (with enclosure;) Mr. Preston; Mr. Houghton, Mayfield, (with enclosure;) Mr. Waller; Dr. Brodie, (with enclosure;) Mr. S. Thorp, Sible Hedingham; Mr. Hale, Staveley; Mr. Flynn; Mr. E. P. Smith, (with enclosure;) Mr. J. Sizer, Manningtree; Dr. Cheesman, Lewes, (with enclosure;) Mr. Hicks, Harlow, (with enclosure;) Dr. Harvey, Birmingham; Mr. Garman Reed; Dr. G. Bonavia; Mr. Leach; Mr. Wright, Derby; Mr. Stephenson; Mr. R. Hall, Lincoln, (with enclosure;) Mr. Edwards, (with enclosure;) Mr. Rogers, Hanteville; Dr. Moorhead, Weymouth; Dr. Dyer, Ringwood; Mr. W. Jones; Dr. Davy, Northwoods, (with enclosure;) Mr. Hobblethwaite, (with enclosure;) Mr. Rayner; Mr. Andrews, (with enclosure;) Dr. Pidduck; Mr. Evans; Mr. Harris; Mr. Hanbury; J. D. H. M.; A Doubtful Enquirer; J. G. A., (with enclosure;) Abernethian Society; R. N.; R. C. P.; A Union Surgeon; An English Barber Surgeon; Faith; Royal Institution; Anthropological Society; M.D., (with enclosure;) W., (with enclosure;) Pathological Society; A Surgeon; &c. &c.